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Welcome

AWS Security Hub provides you with a comprehensive view of the security state of your AWS environment and resources. It also provides you with the readiness status of your environment based on controls from supported security standards. Security Hub collects security data from AWS accounts, services, and integrated third-party products and helps you analyze security trends in your environment to identify the highest priority security issues. For more information about Security Hub, see the AWS Security Hub User Guide.

When you use operations in the Security Hub API, the requests are executed only in the AWS Region that is currently active or in the specific AWS Region that you specify in your request. Any configuration or settings change that results from the operation is applied only to that Region. To make the same change in other Regions, run the same command for each Region in which you want to apply the change.

For example, if your Region is set to us-west-2, when you use CreateMembers to add a member account to Security Hub, the association of the member account with the administrator account is created only in the us-west-2 Region. Security Hub must be enabled for the member account in the same Region that the invitation was sent from.

The following throttling limits apply to using Security Hub API operations.

- BatchEnableStandards - RateLimit of 1 request per second. BurstLimit of 1 request per second.
- GetFindings - RateLimit of 3 requests per second. BurstLimit of 6 requests per second.
- BatchImportFindings - RateLimit of 10 requests per second. BurstLimit of 30 requests per second.
- BatchUpdateFindings - RateLimit of 10 requests per second. BurstLimit of 30 requests per second.
- UpdateStandardsControl - RateLimit of 1 request per second. BurstLimit of 5 requests per second.
- All other operations - RateLimit of 10 requests per second. BurstLimit of 30 requests per second.

This document was last published on August 3, 2023.
Actions

The following actions are supported:

- AcceptAdministratorInvitation (p. 4)
- AcceptInvitation (p. 6)
- BatchDeleteAutomationRules (p. 9)
- BatchDisableStandards (p. 12)
- BatchEnableStandards (p. 14)
- BatchGetAutomationRules (p. 17)
- BatchGetSecurityControls (p. 24)
- BatchGetStandardsControlAssociations (p. 27)
- BatchImportFindings (p. 30)
- BatchUpdateAutomationRules (p. 93)
- BatchUpdateFindings (p. 100)
- BatchUpdateStandardsControlAssociations (p. 105)
- CreateActionTarget (p. 108)
- CreateAutomationRule (p. 111)
- CreateFindingAggregator (p. 119)
- CreateInsight (p. 122)
- CreateMembers (p. 134)
- DeclineInvitations (p. 137)
- DeleteActionTarget (p. 139)
- DeleteFindingAggregator (p. 141)
- DeleteInsight (p. 143)
- DeleteInvitations (p. 145)
- DeleteMembers (p. 148)
- DescribeActionTargets (p. 150)
- DescribeHub (p. 153)
- DescribeOrganizationConfiguration (p. 156)
- DescribeProducts (p. 158)
- DescribeStandards (p. 161)
- DescribeStandardsControls (p. 163)
- DisableImportFindingsForProduct (p. 166)
- DisableOrganizationAdminAccount (p. 168)
- DisableSecurityHub (p. 170)
- DisassociateFromAdministratorAccount (p. 172)
- DisassociateFromMasterAccount (p. 174)
- DisassociateMembers (p. 176)
- EnableImportFindingsForProduct (p. 178)
- EnableOrganizationAdminAccount (p. 180)
- EnableSecurityHub (p. 182)
- GetAdministratorAccount (p. 185)
- GetEnabledStandards (p. 187)
• **GetFindingAggregator (p. 190)**
  • **GetFindingHistory (p. 193)**
  • **GetFindings (p. 197)**
  • **GetInsightResults (p. 270)**
  • **GetInsights (p. 272)**
  • **GetInvitationsCount (p. 284)**
  • **GetMasterAccount (p. 286)**
  • **GetMembers (p. 288)**
  • **InviteMembers (p. 291)**
  • **ListAutomationRules (p. 294)**
  • **ListEnabledProductsForImport (p. 297)**
  • **ListFindingAggregators (p. 299)**
  • **ListInvitations (p. 301)**
  • **ListMembers (p. 304)**
  • **ListOrganizationAdminAccounts (p. 307)**
  • **ListSecurityControlDefinitions (p. 309)**
  • **ListStandardsControlAssociations (p. 312)**
  • **ListTagsForResource (p. 315)**
  • **TagResource (p. 317)**
  • **UntagResource (p. 319)**
  • **UpdateActionTarget (p. 321)**
  • **UpdateFindingAggregator (p. 323)**
  • **UpdateFindings (p. 327)**
  • **UpdateInsight (p. 339)**
  • **UpdateOrganizationConfiguration (p. 351)**
  • **UpdateSecurityHubConfiguration (p. 353)**
  • **UpdateStandardsControl (p. 355)**
AcceptAdministratorInvitation

Accepts the invitation to be a member account and be monitored by the Security Hub administrator account that the invitation was sent from.

This operation is only used by member accounts that are not added through Organizations.

When the member account accepts the invitation, permission is granted to the administrator account to view findings generated in the member account.

Request Syntax

POST /administrator HTTP/1.1
Content-type: application/json

{  
   "AdministratorId": "string",
   "InvitationId": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AdministratorId (p. 4)

The account ID of the Security Hub administrator account that sent the invitation.

Type: String

Pattern: .*\S.*

Required: Yes

InvitationId (p. 4)

The identifier of the invitation sent from the Security Hub administrator account.

Type: String

Pattern: .*\S.*

Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

  Internal server error.

  HTTP Status Code: 500

**InvalidAccessException**

  The account doesn't have permission to perform this action.

  HTTP Status Code: 401

**InvalidInputException**

  The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

  HTTP Status Code: 400

**LimitExceededException**

  The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

  HTTP Status Code: 429

**ResourceNotFoundException**

  The request was rejected because we can't find the specified resource.

  HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
AcceptInvitation

This method is deprecated. Instead, use AcceptAdministratorInvitation.

The Security Hub console continues to use AcceptInvitation. It will eventually change to use AcceptAdministratorInvitation. Any IAM policies that specifically control access to this function must continue to use AcceptInvitation. You should also add AcceptAdministratorInvitation to your policies to ensure that the correct permissions are in place after the console begins to use AcceptAdministratorInvitation.

Accepts the invitation to be a member account and be monitored by the Security Hub administrator account that the invitation was sent from.

This operation is only used by member accounts that are not added through Organizations.

When the member account accepts the invitation, permission is granted to the administrator account to view findings generated in the member account.

Request Syntax

POST /master HTTP/1.1
Content-type: application/json

{  "InvitationId": "string",
  "MasterId": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

InvitationId (p. 6)

The identifier of the invitation sent from the Security Hub administrator account.

Type: String

Pattern: .*\S.*

Required: Yes

MasterId (p. 6)

The account ID of the Security Hub administrator account that sent the invitation.

Type: String

Pattern: .*\S.*

Required: Yes
Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
See Also

- AWS SDK for Ruby V3
BatchDeleteAutomationRules

Deletes one or more automation rules.

Request Syntax

POST /automationrules/delete HTTP/1.1
Content-type: application/json

{
   "AutomationRulesArns": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AutomationRulesArns (p. 9)

A list of Amazon Resource Names (ARNs) for the rules that are to be deleted.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Pattern: .*\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "ProcessedAutomationRules": [ "string" ],
   "UnprocessedAutomationRules": [
      {
         "ErrorCode": number,
         "ErrorMessage": "string",
         "RuleArn": "string"
      }
   ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.
ProcessedAutomationRules (p. 9)

A list of properly processed rule ARNs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Pattern: .*\S.*

UnprocessedAutomationRules (p. 9)

A list of objects containing RuleArn, ErrorCode, and ErrorMessage. This parameter tells you which automation rules the request didn't delete and why.

Type: Array of UnprocessedAutomationRule (p. 544) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
See Also

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchDisableStandards

Disables the standards specified by the provided StandardsSubscriptionArns.

For more information, see Security Standards section of the AWS Security Hub User Guide.

Request Syntax

POST /standards/deregister HTTP/1.1
Content-type: application/json

{  
   "StandardsSubscriptionArns": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

StandardsSubscriptionArns (p. 12)

The ARNs of the standards subscriptions to disable.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: .*\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
   "StandardsSubscriptions": [
      {  
          "StandardsArn": "string",
          "StandardsInput": {  
              "string" : "string"
          },
          "StandardsStatus": "string",
          "StandardsStatusReason": {  
              "StatusReasonCode": "string"
          },
          "StandardsSubscriptionArn": "string"
      }
   ]
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**StandardsSubscriptions (p. 12)**

The details of the standards subscriptions that were disabled.

Type: Array of StandardsSubscription (p. 535) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
BatchEnableStandards

Enables the standards specified by the provided StandardsArn. To obtain the ARN for a standard, use the DescribeStandards operation.

For more information, see the Security Standards section of the AWS Security Hub User Guide.

Request Syntax

POST /standards/register HTTP/1.1
Content-type: application/json

{
  "StandardsSubscriptionRequests": [
    {
      "StandardsArn": "string",
      "StandardsInput": {
        "string": "string"
      }
    }
  ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

StandardsSubscriptionRequests (p. 14)

The list of standards checks to enable.

Type: Array of StandardsSubscriptionRequest (p. 537) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "StandardsSubscriptions": [
    {
      "StandardsArn": "string",
      "StandardsInput": {
        "string": "string"
      },
      "StandardsStatus": "string",
      "StandardsStatusReason": {
        "StatusReasonCode": "string"
      }
    }
  ]
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

StandardsSubscriptions (p. 14)

The details of the standards subscriptions that were enabled.

Type: Array of StandardsSubscription (p. 535) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
See Also

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchGetAutomationRules

Retrieves a list of details for automation rules based on rule Amazon Resource Names (ARNs).

Request Syntax

POST /automationrules/get HTTP/1.1
Content-type: application/json

{  
  "AutomationRulesArns": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**AutomationRulesArns (p. 17)**

A list of rule ARNs to get details for.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Pattern: .\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "Rules": [  
    {  
      "Actions": [  
        "FindingFieldsUpdate": {  
          "Confidence": number,  
          "Criticality": number,  
          "Note": {  
            "Text": "string",  
            "UpdatedBy": "string"  
          },  
          "RelatedFindings": [  
            {  
              "Id": "string",  
              "ProductArn": "string"  
            }  
          ]  
        }
      ]  
    }
  ]
}

API Version 2018-10-26
"Severity": {
  "Label": "string",
  "Normalized": number,
  "Product": number
},
"Types": [ "string" ],
"UserDefinedFields": {
  "string": "string"
},
"VerificationState": "string",
"Workflow": {
  "Status": "string"
}
},
"Type": "string"
},
"CreatedAt": "string",
"CreatedBy": "string",
"Criteria": {
  "AwsAccountId": [
    {
      "Comparison": "string",
      "Value": "string"
    }
  ],
  "CompanyName": [
    {
      "Comparison": "string",
      "Value": "string"
    }
  ],
  "ComplianceAssociatedStandardsId": [
    {
      "Comparison": "string",
      "Value": "string"
    }
  ],
  "ComplianceSecurityControlId": [
    {
      "Comparison": "string",
      "Value": "string"
    }
  ],
  "ComplianceStatus": [
    {
      "Comparison": "string",
      "Value": "string"
    }
  ],
  "Confidence": [
    {
      "Eq": number,
      "Gt": number,
      "Lt": number
    }
  ],
  "CreatedAt": [
    {
      "DateRange": {
        "Unit": "string",
        "Value": number
      },
      "End": "string",
      "Start": "string"
    }
  ]}
"Criticality": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"Description": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FirstObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"GeneratorId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Id": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"LastObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"NoteText": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NoteUpdatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"NoteUpdatedBy": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]


```
],
"ProductArn": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ProductName": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"RecordState": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"RelatedFindingsId": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"RelatedFindingsProductArn": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceDetailsOther": [
    {
        "Comparison": "string",
        "Key": "string",
        "Value": "string"
    }
],
"ResourceId": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourcePartition": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceRegion": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceTags": [
    {
        "Comparison": "string",
        "Key": "string",
        "Value": "string"
    }
],
"ResourceType": [
    {

"Comparison": "string",
"Value": "string"
]
],
"SeverityLabel": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"SourceUrl": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"Title": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"Type": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"UpdatedAt": [
{ 
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
},
],
"UserDefinedFields": [
{ 
"Comparison": "string",
"Key": "string",
"Value": "string"
},
],
"VerificationState": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"WorkflowStatus": [
{ 
"Comparison": "string",
"Value": "string"
},
],
"Description": "string",
"IsTerminal": boolean,
"RuleArn": "string",
"RuleName": "string",
"RuleOrder": number,
"RuleStatus": "string",
"UpdatedAt": "string"
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Rules (p. 17)

A list of rule details for the provided rule ARNs.

Type: Array of AutomationRulesConfig (p. 388) objects

UnprocessedAutomationRules (p. 17)

A list of objects containing RuleArn, ErrorCode, and ErrorMessage. This parameter tells you which automation rules the request didn't retrieve and why.

Type: Array of UnprocessedAutomationRule (p. 544) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
BatchGetSecurityControls

Provides details about a batch of security controls for the current AWS account and AWS Region.

Request Syntax

POST /securityControls/batchGet HTTP/1.1
Content-type: application/json

{
    "SecurityControlIds": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

SecurityControlIds (p. 24)

A list of security controls (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters). The security control ID or Amazon Resource Name (ARN) is the same across standards.

Type: Array of strings

Pattern: .*\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "SecurityControls": [ 
        {
            "Description": "string",
            "RemediationUrl": "string",
            "SecurityControlArn": "string",
            "SecurityControlId": "string",
            "SecurityControlStatus": "string",
            "SeverityRating": "string",
            "Title": "string"
        }
    ],
    "UnprocessedIds": [ 
        {
            "ErrorCode": "string",
            "ErrorReason": "string",
            "SecurityControlId": "string"
        }
    ]
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**SecurityControls (p. 24)**

An array that returns the identifier, Amazon Resource Name (ARN), and other details about a security control. The same information is returned whether the request includes SecurityControlId or SecurityControlArn.

Type: Array of SecurityControl (p. 510) objects

**UnprocessedIds (p. 24)**

A security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) for which details cannot be returned.

Type: Array of UnprocessedSecurityControl (p. 545) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
See Also

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**BatchGetStandardsControlAssociations**

For a batch of security controls and standards, identifies whether each control is currently enabled or disabled in a standard.

### Request Syntax

```
POST /associations/batchGet HTTP/1.1
Content-type: application/json

{
   "StandardsControlAssociationIds": [ 
      {
         "SecurityControlId": "string",
         "StandardsArn": "string"
      }
   ]
}
```

### URI Request Parameters

The request does not use any URI parameters.

### Request Body

The request accepts the following data in JSON format.

**StandardsControlAssociationIds (p. 27)**

An array with one or more objects that includes a security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) and the Amazon Resource Name (ARN) of a standard. This field is used to query the enablement status of a control in a specified standard. The security control ID or ARN is the same across standards.

Type: Array of [StandardsControlAssociationId (p. 529)] objects

Required: Yes

### Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "StandardsControlAssociationDetails": [ 
      {
         "AssociationStatus": "string",
         "RelatedRequirements": [ "string" ],
         "SecurityControlArn": "string",
         "SecurityControlId": "string",
         "StandardsArn": "string",
         "StandardsControlArns": [ "string" ],
         "StandardsControlDescription": "string",
         "StandardsControlTitle": "string",
         "UpdatedAt": "string"
      }
   ]
}
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**StandardsControlAssociationDetails (p. 27)**

Provides the enablement status of a security control in a specified standard and other details for the control in relation to the specified standard.

Type: Array of StandardsControlAssociationDetail (p. 527) objects

**UnprocessedAssociations (p. 27)**

A security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) whose enablement status in a specified standard cannot be returned.

Type: Array of UnprocessedStandardsControlAssociation (p. 546) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalErrorException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchImportFindings

Imports security findings generated by a finding provider into Security Hub. This action is requested by the finding provider to import its findings into Security Hub.

BatchImportFindings must be called by one of the following:

- The AWS account that is associated with a finding if you are using the default product ARN or are a partner sending findings from within a customer's AWS account. In these cases, the identifier of the account that you are calling BatchImportFindings from needs to be the same as the AwsAccountId attribute for the finding.
- An AWS account that Security Hub has allow-listed for an official partner integration. In this case, you can call BatchImportFindings from the allow-listed account and send findings from different customer accounts in the same batch.

The maximum allowed size for a finding is 240 Kb. An error is returned for any finding larger than 240 Kb.

After a finding is created, BatchImportFindings cannot be used to update the following finding fields and objects, which Security Hub customers use to manage their investigation workflow.

- Note
- UserDefinedFields
- VerificationState
- Workflow

Finding providers also should not use BatchImportFindings to update the following attributes.

- Confidence
- Criticality
- RelatedFindings
- Severity
- Types

Instead, finding providers use FindingProviderFields to provide values for these attributes.

Request Syntax

```json
POST /findings/import HTTP/1.1
Content-type: application/json

{
   "Findings": [
      {
         "Action": {
            "ActionType": "string",
            "AwsApiCallAction": {
               "AffectedResources": {
                  "string": "string"
               },
               "Api": "string",
               "CallerType": "string",
               "DomainDetails": {
                  "Domain": "string"
               }
            }
         }
      }
   ]
}
```
"FirstSeen": "string",
"LastSeen": "string",
"RemoteIpDetails": {
  "City": {
    "CityName": "string"
  },
  "Country": {
    "CountryCode": "string",
    "CountryName": "string"
  },
  "GeoLocation": {
    "Lat": number,
    "Lon": number
  },
  "IpAddressV4": "string",
  "Organization": {
    "Asn": number,
    "AsnOrg": "string",
    "Isp": "string",
    "Org": "string"
  }
},
"ServiceName": "string"
},
"DnsRequestAction": {
  "Blocked": boolean,
  "Domain": "string",
  "Protocol": "string"
},
"NetworkConnectionAction": {
  "Blocked": boolean,
  "ConnectionDirection": "string",
  "LocalPortDetails": {
    "Port": number,
    "PortName": "string"
  },
  "Protocol": "string",
  "RemoteIpDetails": {
    "City": {
      "CityName": "string"
    },
    "Country": {
      "CountryCode": "string",
      "CountryName": "string"
    },
    "GeoLocation": {
      "Lat": number,
      "Lon": number
    },
    "IpAddressV4": "string",
    "Organization": {
      "Asn": number,
      "AsnOrg": "string",
      "Isp": "string",
      "Org": "string"
    }
  },
  "RemotePortDetails": {
    "Port": number,
    "PortName": "string"
  }
},
"PortProbeAction": {
  "Blocked": boolean,
  "PortProbeDetails": [
AWS Security Hub API Reference

Request Syntax

```json
{
  "LocalIpDetails": {
    "IpAddressV4": "string"
  },
  "LocalPortDetails": {
    "Port": number,
    "PortName": "string"
  },
  "RemoteIpDetails": {
    "City": {
      "CityName": "string"
    },
    "Country": {
      "CountryCode": "string",
      "CountryName": "string"
    },
    "GeoLocation": {
      "Lat": number,
      "Lon": number
    },
    "IpAddressV4": "string",
    "Organization": {
      "Asn": number,
      "AsnOrg": "string",
      "Isp": "string",
      "Org": "string"
    }
  }
}

"AwsAccountId": "string",
"CompanyName": "string",
"Compliance": {
  "AssociatedStandards": [
    {
      "StandardsId": "string"
    }
  ],
  "RelatedRequirements": [ "string" ],
  "SecurityControlId": "string",
  "Status": "string",
  "StatusReasons": [
    {
      "Description": "string",
      "ReasonCode": "string"
    }
  ]
},
"Confidence": number,
"CreatedAt": "string",
"Criticality": number,
"Description": "string",
"FindingProviderFields": {
  "Confidence": number,
  "Criticality": number,
  "RelatedFindings": [
    {
      "Id": "string",
      "ProductArn": "string"
    }
  ],
  "Severity": {
    "Label": "string",
    "Original": "string"
  }
}
```

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"Types": [ "string" ],
"FirstObservedAt": "string",
"GeneratorId": "string",
"Id": "string",
"LastObservedAt": "string",
"Malware": [
  {
    "Name": "string",
    "Path": "string",
    "State": "string",
    "Type": "string"
  }
],
"Network": {
  "DestinationDomain": "string",
  "DestinationIpV4": "string",
  "DestinationIpV6": "string",
  "DestinationPort": number,
  "Direction": "string",
  "OpenPortRange": {
    "Begin": number,
    "End": number
  },
  "Protocol": "string",
  "SourceDomain": "string",
  "SourceIpV4": "string",
  "SourceIpV6": "string",
  "SourceMac": "string",
  "SourcePort": number
},
"NetworkPath": [
  {
    "ComponentId": "string",
    "ComponentType": "string",
    "Egress": {
      "Destination": {
        "Address": [ "string" ],
        "PortRanges": [
          {
            "Begin": number,
            "End": number
          }
        ]
      },
      "Protocol": "string",
      "Source": {
        "Address": [ "string" ],
        "PortRanges": [
          {
            "Begin": number,
            "End": number
          }
        ]
      }
    },
    "Ingress": {
      "Destination": {
        "Address": [ "string" ],
        "PortRanges": [
          {
            "Begin": number,
            "End": number
          }
        ]
      },
      "Protocol": "string",
      "Source": {
        "Address": [ "string" ],
        "PortRanges": [
          {
            "Begin": number,
            "End": number
          }
        ]
      }
    }
  }
]
{,
  "Protocol": "string",
  "Source": {
    "Address": [ "string" ],
    "PortRanges": [ {
      "Begin": number,
      "End": number
    } ]
  },
  "Note": {
    "Text": "string",
    "UpdatedAt": "string",
    "UpdatedBy": "string"
  },
  "PatchSummary": {
    "FailedCount": number,
    "Id": "string",
    "InstalledCount": number,
    "InstalledOtherCount": number,
    "InstalledPendingReboot": number,
    "InstalledRejectedCount": number,
    "MissingCount": number,
    "Operation": "string",
    "OperationEndTime": "string",
    "OperationStartTime": "string",
    "RebootOption": "string"
  },
  "Process": {
    "LaunchedAt": "string",
    "Name": "string",
    "ParentPid": number,
    "Path": "string",
    "Pid": number,
    "TerminatedAt": "string"
  },
  "ProductArn": "string",
  "ProductFields": {
    "string": "string"
  },
  "ProductName": "string",
  "RecordState": "string",
  "Region": "string",
  "RelatedFindings": [
    { "Id": "string",
      "ProductArn": "string"
    }
  ],
  "Remediation": {
    "Recommendation": {
      "Text": "string",
      "Url": "string"
    }
  },
  "Resources": [
    {
      "DataClassification": {
        "DetailedResultsLocation": "string",
        "Result": {
          "AdditionalOccurrences": boolean,
          "CustomDataIdentifiers": {
          }}}}]}
"Detections": [  
  
  "Arn": "string",  
  "Count": number,  
  "Name": "string",  
  "Occurrences": {  
    "Cells": [  
      "CellReference": "string",  
      "Column": number,  
      "ColumnName": "string",  
      "Row": number  
    ],  
    "LineRanges": [  
      "End": number,  
      "Start": number,  
      "StartColumn": number  
    ],  
    "OffsetRanges": [  
      "End": number,  
      "Start": number,  
      "StartColumn": number  
    ],  
    "Pages": [  
      "LineRange": {  
        "End": number,  
        "Start": number,  
        "StartColumn": number  
      },  
      "OffsetRange": {  
        "End": number,  
        "Start": number,  
        "StartColumn": number  
      },  
      "PageNumber": number  
    ],  
    "Records": [  
      "JsonPath": "string",  
      "RecordIndex": number  
    ]  
  }  
],  
"TotalCount": number  
},  
"MimeType": "string",  
"SensitiveData": [  
  "Category": "string",  
  "Detections": [  
    "Count": number,  
    "Occurrences": {  
      "Cells": [  
        "CellReference": "string",  
        "Column": number,  
      ]  
    }  
  ]  
]
Request Syntax

"ColumnName": "string",
"Row": number
},
"LineRanges": [
{
"End": number,
"Start": number,
"StartColumn": number
}
],
"OffsetRanges": [
{
"End": number,
"Start": number,
"StartColumn": number
}
],
"Pages": [
{
"LineRange": {
"End": number,
"Start": number,
"StartColumn": number
},
"OffsetRange": {
"End": number,
"Start": number,
"StartColumn": number
},
"PageNumber": number
}
],
"Records": [
{
"JsonPath": "string",
"RecordIndex": number
}
],
"Type": "string"
],
"TotalCount": number
]
],
"SizeClassified": number,
"Status": {
"Code": "string",
"Reason": "string"
}
]
},
"Details": {
"AwsAmazonMqBroker": {
"AuthenticationStrategy": "string",
"AutoMinorVersionUpgrade": boolean,
"BrokerArn": "string",
"BrokerId": "string",
"BrokerName": "string",
"DeploymentMode": "string",
"EncryptionOptions": {
"KmsKeyId": "string",
"UseAwsOwnedKey": boolean
},
"EngineType": "string",
"EngineVersion": "string",
"Health": "string",
"InstanceARN": "string",
"InstanceId": "string",
"InstanceType": "string",
"Message": "string",
"MessageId": "string",
"MessageProducerId": "string",
"MessageProducerName": "string",
"MessageTarget": "string",
"MessageTargetArn": "string",
"MessageType": "string",
"Name": "string",
"NetworkConfiguration": {
"DestinationId": "string",
"SourceId": "string",
"SourceType": "string",
"SourceTypeArn": "string",
"SourceTypeRegion": "string",
"TargetArn": "string",
"TargetId": "string",
"TargetType": "string",
"TargetTypeArn": "string",
"TargetTypeRegion": "string"
},
"ProblemDetails": {
"Details": {
"AwsAmazonMqBroker": {
"AuthenticationStrategy": "string",
"AutoMinorVersionUpgrade": boolean,
"BrokerArn": "string",
"BrokerId": "string",
"BrokerName": "string",
"DeploymentMode": "string",
"EncryptionOptions": {
"KmsKeyId": "string",
"UseAwsOwnedKey": boolean
},
"EngineType": "string",
"EngineVersion": "string",...
"EngineVersion": "string",
"HostInstanceType": "string",
"LdapServerMetadata": {
    "Hosts": [ "string" ],
    "RoleBase": "string",
    "RoleName": "string",
    "RoleSearchMatching": "string",
    "RoleSearchSubtree": boolean,
    "ServiceAccountUsername": "string",
    "UserBase": "string",
    "UserRoleName": "string",
    "UserSearchMatching": "string",
    "UserSearchSubtree": boolean
},
"Logs": {
    "Audit": boolean,
    "AuditLogGroup": "string",
    "General": boolean,
    "GeneralLogGroup": "string",
    "Pending": {
        "Audit": boolean,
        "General": boolean
    }
},
"MaintenanceWindowStartTime": {
    "DayOfWeek": "string",
    "TimeOfDay": "string",
    "TimeZone": "string"
},
"PubliclyAccessible": boolean,
"SecurityGroups": [ "string" ],
"StorageType": "string",
"SubnetIds": [ "string" ],
"Users": [
    {
        "PendingChange": "string",
        "Username": "string"
    }
],
"AwsApiGatewayRestApi": {
    "ApiKeySource": "string",
    "BinaryMediaTypes": [ "string" ],
    "CreatedDate": "string",
    "Description": "string",
    "EndpointConfiguration": {
        "Types": [ "string" ]
    },
    "Id": "string",
    "MinimumCompressionSize": number,
    "Name": "string",
    "Version": "string"
},
"AwsApiGatewayStage": {
    "AccessLogSettings": {
        "DestinationArn": "string",
        "Format": "string"
    },
    "CacheClusterEnabled": boolean,
    "CacheClusterSize": "string",
    "CacheClusterStatus": "string",
    "CanarySettings": {
        "DeploymentId": "string",
        "PercentTraffic": number,
        "StageVariableOverrides": {
            "string": "string"
        }
    }}
"UseStageCache": boolean,
"ClientCertificateId": "string",
"CreatedDate": "string",
"DeploymentId": "string",
"Description": "string",
"DocumentationVersion": "string",
"LastUpdatedDate": "string",
"MethodSettings": [
  {
    "CacheDataEncrypted": boolean,
    "CacheTtlInSeconds": number,
    "CachingEnabled": boolean,
    "DataTraceEnabled": boolean,
    "HttpMethod": "string",
    "LoggingLevel": "string",
    "MetricsEnabled": boolean,
    "RequireAuthorizationForCacheControl": boolean,
    "ResourcePath": "string",
    "ThrottlingBurstLimit": number,
    "ThrottlingRateLimit": number,
    "UnauthorizedCacheControlHeaderStrategy": "string"
  }
],
"StageName": "string",
"TracingEnabled": boolean,
"Variables": {
  "string": "string"
},
"WebAclArn": "string"
},
"AwsApiGatewayV2Api": {
  "ApiEndpoint": "string",
  "ApiId": "string",
  "ApiKeySelectionExpression": "string",
  "CorsConfiguration": {
    "AllowCredentials": boolean,
    "AllowHeaders": [ "string" ],
    "AllowMethods": [ "string" ],
    "AllowOrigins": [ "string" ],
    "ExposeHeaders": [ "string" ],
    "MaxAge": number
  },
  "CreatedDate": "string",
  "Description": "string",
  "Name": "string",
  "ProtocolType": "string",
  "RouteSelectionExpression": "string",
  "Version": "string"
},
"AwsApiGatewayV2Stage": {
  "AccessLogSettings": {
    "DestinationArn": "string",
    "Format": "string"
  },
  "ApiGatewayManaged": boolean,
  "AutoDeploy": boolean,
  "ClientCertificateId": "string",
  "CreatedDate": "string",
  "DefaultRouteSettings": {
    "DataTraceEnabled": boolean,
    "DetailedMetricsEnabled": boolean,
    "LoggingLevel": "string",
    "ThrottlingBurstLimit": number,
    "ThrottlingRateLimit": number
  }
}
"DeploymentId": "string",
"Description": "string",
"LastDeploymentStatusMessage": "string",
"LastUpdatedDate": "string",
"RouteSettings": {
  "DataTraceEnabled": boolean,
  "DetailedMetricsEnabled": boolean,
  "LoggingLevel": "string",
  "ThrottlingBurstLimit": number,
  "ThrottlingRateLimit": number
},
"StageName": "string",
"StageVariables": {
  "string": "string"
}

"ApiId": "string",
"Arn": "string",
"AuthenticationType": "string",
"Id": "string",
"LambdaAuthorizerConfig": {
  "AuthorizerResultTtlInSeconds": number,
  "AuthorizeUri": "string",
  "IdentityValidationExpression": "string"
},
"OpenIdConnectConfig": {
  "AuthTtl": number,
  "ClientId": "string",
  "IatTtl": number,
  "Issuer": "string"
},
"UserPoolConfig": {
  "AppIdClientRegex": "string",
  "AwsRegion": "string",
  "DefaultAction": "string",
  "UserPoolId": "string"
}

"LogConfig": {
  "CloudWatchLogsRoleArn": "string",
  "ExcludeVerboseContent": boolean,
  "FieldLogLevel": "string"
},
"Name": "string",
"OpenIdConnectConfig": {
  "AuthTtl": number,
  "ClientId": "string",
  "IatTtl": number,
  "Issuer": "string"
},
"UserPoolConfig": {
  "AppIdClientRegex": "string",
  "AwsRegion": "string",
  "DefaultAction": "string",
  "UserPoolId": "string"}
"WafWebAclArn": "string",
"XrayEnabled": boolean
},
"AwsAthenaWorkGroup": {
  "Configuration": {
    "ResultConfiguration": {
      "EncryptionConfiguration": {
        "EncryptionOption": "string",
        "KmsKey": "string"
      }
    }
  },
  "Description": "string",
  "Name": "string",
  "State": "string"
},
"AwsAutoScalingAutoScalingGroup": {
  "AvailabilityZones": [
    {
      "Value": "string"
    }
  ],
  "CapacityRebalance": boolean,
  "CreatedTime": "string",
  "HealthCheckGracePeriod": number,
  "HealthCheckType": "string",
  "LaunchConfigurationName": "string",
  "LaunchTemplate": {
    "LaunchTemplateId": "string",
    "LaunchTemplateName": "string",
    "Version": "string"
  },
  "LoadBalancerNames": [ "string" ],
  "MixedInstancesPolicy": {
    "InstancesDistribution": {
      "OnDemandAllocationStrategy": "string",
      "OnDemandBaseCapacity": number,
      "OnDemandPercentageAboveBaseCapacity": number,
      "SpotAllocationStrategy": "string",
      "SpotInstancePools": number,
      "SpotMaxPrice": "string"
    },
    "LaunchTemplate": {
      "LaunchTemplateSpecification": {
        "LaunchTemplateId": "string",
        "LaunchTemplateName": "string",
        "Version": "string"
      },
      "Overrides": [
        {
          "InstanceType": "string",
          "WeightedCapacity": "string"
        }
      ]
    }
  }
},
"AwsAutoScalingLaunchConfiguration": {
  "AssociatePublicIpAddress": boolean,
  "BlockDeviceMappings": [
    {
      "DeviceName": "string",
      "Ebs": {
        "DeleteOnTermination": boolean,
        "Encrypted": boolean,
      }
    }
  ]
}
"Iops": number,
"SnapshotId": "string",
"VolumeSize": number,
"VolumeType": "string"
},
"NoDevice": boolean,
"VirtualName": "string"
]
,"ClassicLinkVpcId": "string",
"ClassicLinkVpcSecurityGroups": [ "string" ],
"CreateTime": "string",
"EbsOptimized": boolean,
"IamInstanceProfile": "string",
"ImageId": "string",
"InstanceMonitoring": {  
  "Enabled": boolean 
},
"InstanceType": "string",
"KernelId": "string",
"KeyName": "string",
"LaunchConfigurationName": "string",
"MetadataOptions": {  
  "HttpEndpoint": "string",
  "HttpPutResponseHopLimit": number,
  "HttpTokens": "string"
},
"PlacementTenancy": "string",
"RamdiskId": "string",
"SecurityGroups": [ "string" ],
"SpotPrice": "string",
"UserData": "string"
},
"AwsBackupBackupPlan": {  
  "BackupPlan": {  
    "AdvancedBackupSettings": [  
      {  
        "BackupOptions": {  
          "string": "string" 
        },
        "ResourceType": "string"
      }
    ],
  "BackupPlanName": "string",
  "BackupPlanRule": [  
    {  
      "CompletionWindowMinutes": number,
      "CopyActions": [  
        {  
          "DestinationBackupVaultArn": "string",
          "Lifecycle": {  
            "DeleteAfterDays": number,
            "MoveToColdStorageAfterDays": number
          }
        }
      ],
    "EnableContinuousBackup": boolean,
    "Lifecycle": {  
      "DeleteAfterDays": number,
      "MoveToColdStorageAfterDays": number
    },
    "RuleId": "string",
    "RuleName": "string",
    "ScheduleExpression": "string",
    "StartWindowMinutes": number,
    "TargetBackupVault": "string"
  }
}
AWS Security Hub API Reference
Request Syntax

```
}

"BackupPlanArn": "string",
"BackupPlanId": "string",
"VersionId": "string"

"AwsBackupBackupVault": {
  "AccessPolicy": "string",
  "BackupVaultArn": "string",
  "BackupVaultName": "string",
  "EncryptionKeyArn": "string",
  "Notifications": {
    "BackupVaultEvents": [ "string" ],
    "SnsTopicArn": "string"
  }
}

"AwsBackupRecoveryPoint": {
  "BackupSizeInBytes": number,
  "BackupVaultArn": "string",
  "BackupVaultName": "string",
  "CalculatedLifecycle": {
    "DeleteAt": "string",
    "MoveToColdStorageAt": "string"
  },
  "CompletionDate": "string",
  "CreatedBy": {
    "BackupPlanArn": "string",
    "BackupPlanId": "string",
    "BackupPlanVersion": "string",
    "BackupRuleId": "string"
  },
  "CreationDate": "string",
  "EncryptionKeyArn": "string",
  "IamRoleArn": "string",
  "IsEncrypted": boolean,
  "LastRestoreTime": "string",
  "Lifecycle": {
    "DeleteAfterDays": number,
    "MoveToColdStorageAfterDays": number
  },
  "RecoveryPointArn": "string",
  "ResourceArn": "string",
  "ResourceType": "string",
  "SourceBackupVaultArn": "string",
  "Status": "string",
  "StatusMessage": "string",
  "StorageClass": "string"
}

"AwsCertificateManagerCertificate": {
  "CertificateAuthorityArn": "string",
  "CreatedAt": "string",
  "DomainName": "string",
  "DomainValidationOptions": [ {
    "DomainName": "string",
    "ResourceRecord": { "Name": "string", "Type": "string", "Value": "string" }
  }, {
    "ValidationDomain": "string",
    "ValidationEmails": [ "string" ],
    "ValidationMethod": "string",
    "ValidationStatus": "string"
  }]
}
```
"ExtendedKeyUsages": [  
  {  
    "Name": "string",
    "OId": "string"
  }  
],
"FailureReason": "string",
"ImportedAt": "string",
"InUseBy": [ "string" ],
"IssuedAt": "string",
"Issuer": "string",
"KeyAlgorithm": "string",
"KeyUsages": [  
  {  
    "Name": "string"
  }  
],
"NotAfter": "string",
"NotBefore": "string",
"Options": {  
  "CertificateTransparencyLoggingPreference": "string"
},
"RenewalEligibility": "string",
"RenewalSummary": {  
  "DomainValidationOptions": [  
    {  
      "DomainName": "string",
      "ResourceRecord": {  
        "Name": "string",
        "Type": "string",
        "Value": "string"
      },
      "ValidationDomain": "string",
      "ValidationEmails": [ "string" ],
      "ValidationMethod": "string",
      "ValidationStatus": "string"
    }  
  ],
  "RenewalStatus": "string",
  "RenewalStatusReason": "string",
  "UpdatedAt": "string"
},
"Serial": "string",
"SignatureAlgorithm": "string",
"Status": "string",
"Subject": "string",
"SubjectAlternativeNames": [ "string" ],
"Type": "string"
},
"AwsCloudFormationStack": {  
  "Capabilities": [ "string" ],
  "CreationTime": "string",
  "Description": "string",
  "DisableRollback": boolean,
  "DriftInformation": {  
    "StackDriftStatus": "string"
  },
  "EnableTerminationProtection": boolean,
  "LastUpdatedTime": "string",
  "NotificationArns": [ "string" ],
  "Outputs": [  
    {  
      "Description": "string",
      "OutputKey": "string",
      "OutputValue": "string"
    }  
  ]
}
{  
  "RoleArn": "string",
  "StackId": "string",
  "StackName": "string",
  "StackStatus": "string",
  "StackStatusReason": "string",
  "TimeoutInMinutes": number
},

"AwsCloudFrontDistribution": {
  "CacheBehaviors": {
    "Items": [
      {
        "ViewerProtocolPolicy": "string"
      }
    ]
  },
  "DefaultCacheBehavior": {
    "ViewerProtocolPolicy": "string"
  },
  "DefaultRootObject": "string",
  "DomainName": "string",
  "ETag": "string",
  "LastModifiedTime": "string",
  "Logging": {
    "Bucket": "string",
    "Enabled": boolean,
    "IncludeCookies": boolean,
    "Prefix": "string"
  },
  "OriginGroups": {
    "Items": [
      {
        "FailoverCriteria": {
          "StatusCodes": {
            "Items": [ number ],
            "Quantity": number
          }
        }
      ]
    ]
  },
  "Origins": {
    "Items": [
      {
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          "OriginProtocolPolicy": "string",
          "OriginReadTimeout": number,
          "OriginSslProtocols": {
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            "Quantity": number
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        "DomainName": "string",
        "Id": "string",
        "OriginPath": "string",
        "S3OriginConfig": {
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  "Status": "string",
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"ViewerCertificate": {  
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  "MinimumProtocolVersion": "string",
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  "CloudWatchLogsRoleArn": "string",
  "HasCustomEventSelectors": boolean,
  "HomeRegion": "string",
  "IncludeGlobalServiceEvents": boolean,
  "IsMultiRegionTrail": boolean,
  "IsOrganizationTrail": boolean,
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  "LogFileValidationEnabled": boolean,
  "Name": "string",
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  "S3KeyPrefix": "string",
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  "TrailArn": "string"
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  "AlarmName": "string",
  "ComparisonOperator": "string",
  "DatapointsToAlarm": number,
  "Dimensions": [  
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  "EvaluationPeriods": number,
  "ExtendedStatistic": "string",
  "InsufficientDataActions": [ "string" ],
  "MetricName": "string",
  "Namespace": "string",
  "OkActions": [ "string" ],
  "Period": number,
  "Statistic": "string",
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  "TreatMissingData": "string",
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      "Location": "string",
      "Name": "string",
      "NamespaceType": "string",
      "OverrideArtifactName": boolean,
      "OverrideLocation": "string"
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"Packaging": "string",
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"Environment": {
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  "EnvironmentVariables": [
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  "InsecureSsl": boolean,
  "Location": "string",
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  "Subnets": [ "string" ],
  "VpcId": "string"
}
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      "Path": "string",
      "Type": "string"
    }
  ]
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  "LastUpdateToPayPerRequestDateTime": "string"
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    "IndexName": "string",
    "IndexSizeBytes": number,
    "IndexStatus": "string",
    "ItemCount": number,
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        "KeyType": "string"
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      "ProjectionType": "string"
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    "ProvisionedThroughput": {
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      "NumberOfDecreasesToday": number,
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      "WriteCapacityUnits": number
    }
  }
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      "ProjectionType": "string"
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  "ProvisionedThroughputOverride": {
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  "ReplicaStatus": "string",
  "ReplicaStatusDescription": "string"
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  "SourceTableArn": "string"
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"SseDescription": {
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  "Domain": "string",
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  "NetworkInterfaceId": "string",
  "NetworkInterfaceOwnerId": "string",
  "PrivateIpAddress": "string",
  "PublicIp": "string",
  "PublicIpv4Pool": "string"
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"AwsEc2Instance": {
  "IamInstanceProfileArn": "string",
  "ImageId": "string",
  "Ipv4Addresses": [ "string" ],
  "Ipv6Addresses": [ "string" ],
  "KeyName": "string",
  "LaunchedAt": "string",
  "MetadataOptions": {
    "HttpEndpoint": "string",
    "HttpProtocolIpv6": "string",
    "HttpPutResponseHopLimit": number,
    "HttpTokens": "string"
  }
}

AWS Security Hub API Reference
Request Syntax
"InstanceMetadataTags": "string",
"Monitoring": {
  "State": "string"
},
"NetworkInterfaces": [
  {
    "NetworkInterfaceId": "string"
  }
],
"SubnetId": "string",
"Type": "string",
"VirtualizationType": "string",
"VpcId": "string"
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"AwsEc2LaunchTemplate": {
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  "Id": "string",
  "LatestVersionNumber": number,
  "LaunchTemplateData": {
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        "Ebs": {
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          "Encrypted": boolean,
          "Iops": number,
          "KmsKeyId": "string",
          "SnapshotId": "string",
          "Throughput": number,
          "VolumeSize": number,
          "VolumeType": "string"
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        "NoDevice": "string",
        "VirtualName": "string"
      }
    ],
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      "CapacityReservationTarget": {
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        "CapacityReservationResourceGroupArn": "string"
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  "CpuOptions": {
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    "ThreadsPerCore": number
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  "CreditSpecification": {
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  "DisableApiTermination": boolean,
  "EbsOptimized": boolean,
  "ElasticGpuSpecificationSet": [
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    }
  ],
  "ElasticInferenceAcceleratorSet": [
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      "Type": "string"
    }
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  "EnclaveOptions": {
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    "EnclaveSecurityGroupSet": [
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      }
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      "HttpPutResponseHopLimitInSec": number
    }
  }
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  "Name": "string"
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    "MaxPrice": "string",
    "SpotInstanceType": "string",
    "ValidUntil": "string"
  }
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    "Min": number
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  "AcceleratorNames": [ "string" ],
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    "Min": number
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    "Min": number
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  "MemoryMiB": {
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    "Min": number
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    "Min": number
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  "RequireHibernateSupport": boolean,
  "SpotMaxPricePercentageOverLowestPrice": number,
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    "Min": number
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AWS Security Hub API Reference

Request Syntax

```json
{
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  "KernelId": "string",
  "KeyName": "string",
  "LicenseSet": [
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      "LicenseConfigurationArn": "string"
    }
  ],
  "MaintenanceOptions": {
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  },
  "MetadataOptions": {
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    "HttpProtocolIpv6": "string",
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    "InstanceMetadataTags": "string"
  },
  "Monitoring": {
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  "NetworkInterfaceSet": [
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      "AssociationPublicIpAddress": boolean,
      "DeleteOnTermination": boolean,
      "Description": "string",
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      "Groups": ["string"],
      "InterfaceType": "string",
      "Ipv4PrefixCount": number,
      "Ipv4Prefixes": [
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        }
      ],
      "Ipv6AddressCount": number,
      "Ipv6Addresses": [
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          "Ipv6Address": "string"
        }
      ],
      "Ipv6PrefixCount": number,
      "Ipv6Prefixes": [
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        }
      ],
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      "PrivateIpAddress": "string",
      "PrivateIpAddresses": [
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          "PrivateIpAddress": "string"
        }
      ],
      "SecondaryPrivateIpAddressCount": number,
      "SubnetId": "string"
    }
  ],
  "Placement": {
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    "AvailabilityZone": "string",
    "Affinity": "string",
    "AvailabilityZone": "string"
  }
}
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"Tenancy": "string"
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"EnableResourceNameDnsARecord": boolean,
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"SecurityGroupSet": [ "string" ],
"UserData": "string"
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"LaunchTemplateName": "string"
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"NetworkAclId": "string",
"SubnetId": "string"
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"Entries": [ {
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"Type": number
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"Ipv6CidrBlock": "string",
"PortRange": {
"From": number,
"To": number
},
"Protocol": "string",
"RuleAction": "string",
"RuleNumber": number
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"IsDefault": boolean,
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        "PrivateIpAddress": "string"
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        "GroupName": "string"
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                "StatusMessage": "string"
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            "Main": boolean,
            "RouteTableAssociationId": "string",
            "RouteTableId": "string",
            "SubnetId": "string"
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    ],
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            "CoreNetworkArn": "string",
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            "DestinationIpv6CidrBlock": "string",
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            "EgressOnlyInternetGatewayId": "string",
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            "InstanceId": "string",
            "InstanceOwnerId": "string",
            "LocalGatewayId": "string",
            "NatGatewayId": "string",
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    "GroupName": "string",
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            "IpProtocol": "string",
        }
    ]}
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"Ipv6Ranges": [
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  }
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"ToPort": number,
"UserIdGroupPairs": [
  {
    "GroupId": "string",
    "GroupName": "string",
    "PeeringStatus": "string",
    "UserId": "string",
    "VpcId": "string",
    "VpcPeeringConnectionId": "string"
  }
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    ],
    "Ipv6Ranges": [
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    ],
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        "GroupName": "string",
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        "UserId": "string",
        "VpcId": "string",
        "VpcPeeringConnectionId": "string"
      }
    ]
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"AwsEc2Subnet": {
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"AvailabilityZoneId": "string",
"AvailableIpAddressCount": number,
"CidrBlock": "string",
"DefaultForAz": boolean,
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    "Ipv6CidrBlock": "string"
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  "DefaultRouteTableAssociation": "string",
  "DefaultRouteTablePropagation": "string",
  "Description": "string",
  "DnsSupport": "string",
  "Id": "string",
  "MulticastSupport": "string",
  "PropagationDefaultRouteTableId": "string",
  "TransitGatewayCidrBlocks": [ "string" ],
  "VpnEcmpSupport": "string"
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"AwsEc2Volume": {
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      "InstanceId": "string",
      "Status": "string"
    }
  ],
  "CreateTime": "string",
  "DeviceName": "string",
  "Encrypted": boolean,
  "KmsKeyId": "string",
  "Size": number,
  "SnapshotId": "string",
  "Status": "string",
  "VolumeId": "string",
  "VolumeScanStatus": "string",
  "VolumeType": "string"
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"AwsEc2Vpc": {
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      "CidrBlock": "string",
      "CidrBlockState": "string"
    }
  ],
  "DhcpOptionsId": "string",
  "Ipv6CidrBlockAssociationSet": [
    {
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      "CidrBlockState": "string",
      "Ipv6CidrBlock": "string"
    }
  ]
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"Code": "string",
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},
"AwsEc2VpnConnection": {
"Category": "string",
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"RekeyMarginTimeSeconds": number,
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"TunnelInsideCidr": "string"
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"Status": "string",
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"ImagePublishedAt": "string",
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"ImageTags": [ "string" ],
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  "RegistryId": "string"
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"RepositoryName": "string",
"RepositoryPolicyText": "string"
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"AwsEcsCluster": {
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  "CapacityProviders": [ "string" ],
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  "ClusterSettings": [ {
    "Name": "string",
    "Value": "string"
  } ],
  "Configuration": {
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      "KmsKeyId": "string",
      "LogConfiguration": {
        "CloudWatchEncryptionEnabled": boolean,
        "CloudWatchLogGroupName": "string",
        "S3BucketName": "string",
        "S3EncryptionEnabled": boolean,
        "S3KeyPrefix": "string"
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      "Logging": "string"
    }
  },
  "DefaultCapacityProviderStrategy": [ {
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    "CapacityProvider": "string",
    "Weight": number
  } ],
  "RegisteredContainerInstancesCount": number,
  "RunningTasksCount": number,
  "Status": "string"
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"AwsEcsContainer": {
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"AwsEcsService": {
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    "Weight": number
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"DeploymentController": {
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"DesiredCount": number,
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"EnableExecuteCommand": boolean,
"HealthCheckGracePeriodSeconds": number,
"LaunchType": "string",
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    "SecurityGroups": [ "string" ],
    "Subnets": [ "string" ]
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},
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    "Type": "string"
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],
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    "Type": "string"
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    "ContainerPort": number,
    "Port": number,
    "RegistryArn": "string"
  }
],
"TaskDefinition": "string"
},
"AwsEcsTask": {
  "ClusterArn": "string",
  "Containers": [
    {
      "Image": "string",
      "MountPoints": [
        { "ContainerPath": "string" },
      ]
    }
  ]
}
"SourceVolume": "string"
]
],
"Name": "string",
"Privileged": boolean
]
],
"createdAt": "string",
"group": "string",
"startedAt": "string",
"startedBy": "string",
"taskDefinitionArn": "string",
"version": "string",
"Volumes": [
  {
    "Host": {
      "SourcePath": "string"
    },
    "Name": "string"
  }
],
"AwsEcsTaskDefinition": {
  "containerDefinitions": [
    {
      "Command": [ "string" ],
      "Cpu": number,
      "DependsOn": [
        {
          "Condition": "string",
          "ContainerName": "string"
        }
      ],
      "disableNetworking": boolean,
      "DnsSearchDomains": [ "string" ],
      "DnsServers": [ "string" ],
      "dockerLabels": {
        "string": "string"
      },
      "dockerSecurityOptions": [ "string" ],
      "entryPoint": [ "string" ],
      "environment": [
        {
          "Name": "string",
          "Value": "string"
        }
      ],
      "environmentFiles": [
        {
          "Type": "string",
          "Value": "string"
        }
      ],
      "essential": boolean,
      "extraHosts": [
        {
          "Hostname": "string",
          "IpAddress": "string"
        }
      ],
      "firelensConfiguration": {
        "options": {
          "string": "string"
        },
        "type": "string"
      }
    }
  ]
}
"HealthCheck": {
  "Command": [ "string" ],
  "Interval": number,
  "Retries": number,
  "StartPeriod": number,
  "Timeout": number
},
"Hostname": "string",
"Image": "string",
"Interactive": boolean,
"Links": [ "string" ],
"LinuxParameters": {
  "Capabilities": {
    "Add": [ "string" ],
    "Drop": [ "string" ]
  },
  "Devices": [
    {
      "ContainerPath": "string",
      "HostPath": "string",
      "Permissions": [ "string" ]
    }
  ],
  "InitProcessEnabled": boolean,
  "MaxSwap": number,
  "SharedMemorySize": number,
  "Swappiness": number,
  "Tmpfs": {
    "ContainerPath": "string",
    "MountOptions": [ "string" ],
    "Size": number
  }
},
"LogConfiguration": {
  "LogDriver": "string",
  "Options": {
    "string": "string"
  },
  "SecretOptions": [
    {
      "Name": "string",
      "ValueFrom": "string"
    }
  ]
},
"Memory": number,
"MemoryReservation": number,
"MountPoints": [
  {
    "ContainerPath": "string",
    "ReadOnly": boolean,
    "SourceVolume": "string"
  }
],
"Name": "string",
"PortMappings": [
  {
    "ContainerPort": number,
    "HostPort": number,
    "Protocol": "string"
  }
],
"Privileged": boolean,
"PseudoTerminal": boolean,
"ReadonlyRootFilesystem": boolean,
"RepositoryCredentials": {
  "CredentialsParameter": "string"
},
"ResourceRequirements": [
  {
    "Type": "string",
    "Value": "string"
  }
],
"Secrets": [
  {
    "Name": "string",
    "ValueFrom": "string"
  }
],
"StartTimeout": number,
"StopTimeout": number,
"SystemControls": [
  {
    "Namespace": "string",
    "Value": "string"
  }
],
"Ulimits": [
  {
    "HardLimit": number,
    "Name": "string",
    "SoftLimit": number
  }
],
"User": "string",
"VolumesFrom": [
  {
    "ReadOnly": boolean,
    "SourceContainer": "string"
  }
],
"WorkingDirectory": "string"
},
"Cpu": "string",
"ExecutionRoleArn": "string",
"Family": "string",
"InferenceAccelerators": [
  {
    "DeviceName": "string",
    "DeviceType": "string"
  }
],
"IpcMode": "string",
"Memory": "string",
"NetworkMode": "string",
"PidMode": "string",
"PlacementConstraints": [
  {
    "Expression": "string",
    "Type": "string"
  }
],
"ProxyConfiguration": {
  "ContainerName": "string",
  "ProxyConfigurationProperties": [
    {
      "Name": "string",
      "Value": "string"
    }
  ]}
Request Syntax

```json
{
  "Type": "string",
  "RequiresCompatibilities": [ "string" ],
  "TaskRoleArn": "string",
  "Volumes": [
    {
      "DockerVolumeConfiguration": {
        "Autoprovision": boolean,
        "Driver": "string",
        "DriverOpts": {
          "string": "string"
        },
        "Labels": {
          "string": "string"
        },
        "Scope": "string"
      },
      "EfsVolumeConfiguration": {
        "AuthorizationConfig": {
          "AccessPointId": "string",
          "Iam": "string"
        },
        "FilesystemId": "string",
        "RootDirectory": "string",
        "TransitEncryption": "string",
        "TransitEncryptionPort": number
      },
      "Host": {
        "SourcePath": "string"
      },
      "Name": "string"
    }
  ],
  "AwsEfsAccessPoint": {
    "AccessPointId": "string",
    "Arn": "string",
    "ClientToken": "string",
    "FileSystemId": "string",
    "PosixUser": {
      "Gid": "string",
      "SecondaryGids": [ "string" ],
      "Uid": "string"
    },
    "RootDirectory": {
      "CreationInfo": {
        "OwnerGid": "string",
        "OwnerUid": "string",
        "Permissions": "string"
      },
      "Path": "string"
    }
  },
  "AwsEksCluster": {
    "Arn": "string",
    "CertificateAuthorityData": "string",
    "ClusterStatus": "string",
    "Endpoint": "string",
    "Logging": {
      "ClusterLogging": [
        {
          "Enabled": boolean,
          "Types": [ "string" ]
        }
      ]
    }
  }
}
```

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"ResourcesVpcConfig": {
  "EndpointPublicAccess": boolean,
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "string" ]
},
"RoleArn": "string",
"Version": "string"
}

,AwsElasticBeanstalkEnvironment": {
  "ApplicationName": "string",
  "Cname": "string",
  "DateCreated": "string",
  "DateUpdated": "string",
  "Description": "string",
  "EndpointUrl": "string",
  "EnvironmentArn": "string",
  "EnvironmentId": "string",
  "EnvironmentLinks": [
    {
      "EnvironmentName": "string",
      "LinkName": "string"
    }
  ],
  "EnvironmentName": "string",
  "OptionSettings": [
    {
      "Namespace": "string",
      "OptionName": "string",
      "ResourceName": "string",
      "Value": "string"
    }
  ],
  "PlatformArn": "string",
  "SolutionStackName": "string",
  "Status": "string",
  "Tier": {
    "Name": "string",
    "Type": "string",
    "Version": "string"
  },
  "VersionLabel": "string"
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,AwsElasticsearchDomain": {
  "AccessPolicies": "string",
  "DomainEndpointOptions": {
    "EnforceHTTPS": boolean,
    "TLSSecurityPolicy": "string"
  },
  "DomainId": "string",
  "DomainName": "string",
  "ElasticsearchClusterConfig": {
    "DedicatedMasterCount": number,
    "DedicatedMasterEnabled": boolean,
    "DedicatedMasterType": "string",
    "InstanceCount": number,
    "InstanceType": "string",
    "ZoneAwarenessConfig": {
      "AvailabilityZoneCount": number
    },
    "ZoneAwarenessEnabled": boolean
  },
  "ElasticsearchVersion": "string",
  "EncryptionAtRestOptions": {
  
}
"Enabled": boolean,
"KmsKeyId": "string"
},
"Endpoint": "string",
"Endpoints": [
  "string": "string"
],
"LogPublishingOptions": {
  "AuditLogs": {
    "CloudWatchLogsLogGroupArn": "string",
    "Enabled": boolean
  },
  "IndexSlowLogs": {
    "CloudWatchLogsLogGroupArn": "string",
    "Enabled": boolean
  },
  "SearchSlowLogs": {
    "CloudWatchLogsLogGroupArn": "string",
    "Enabled": boolean
  }
},
"NodeToNodeEncryptionOptions": {
  "Enabled": boolean
},
"ServiceSoftwareOptions": {
  "AutomatedUpdateDate": "string",
  "Cancellable": boolean,
  "CurrentVersion": "string",
  "Description": "string",
  "NewVersion": "string",
  "UpdateAvailable": boolean,
  "UpdateStatus": "string"
},
"VPCOptions": {
  "AvailabilityZones": [ "string" ],
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "string" ],
  "VPCId": "string"
},
"AwsElbLoadBalancer": {
  "AvailabilityZones": [ "string" ],
  "BackendServerDescriptions": [ 
    { 
      "InstanceId": "string",
      "PolicyNames": [ "string" ]
    } 
  ],
  "CanonicalHostedZoneName": "string",
  "CanonicalHostedZoneNameId": "string",
  "CreateTime": "string",
  "DnsName": "string",
  "HealthCheck": { 
    "HealthyThreshold": number,
    "Interval": number,
    "Target": "string",
    "Timeout": number,
    "UnhealthyThreshold": number
  },
  "Instances": [ 
    { 
      "InstanceId": "string"
    } 
  ],
  "ListenerDescriptions": [ 
    { 
      "ListenerPort": number,
      "ListenerProtocol": "string"
    } 
  ],
  "LoadBalancerName": "string",
  "LoadBalancerType": "string",
  "Name": "string",
  "PortRange": "string",
  "SslPolicy": "string",
  "SubnetIds": [ "string" ]
}
"Listener": {
   "InstancePort": number,
   "InstanceProtocol": "string",
   "LoadBalancerPort": number,
   "Protocol": "string",
   "SslCertificateId": "string"
},
"PolicyNames": [ "string" ]
},
"LoadBalancerAttributes": {
   "AccessLog": {
      "EmitInterval": number,
      "Enabled": boolean,
      "S3BucketName": "string",
      "S3BucketPrefix": "string"
   },
   "AdditionalAttributes": [ {
      "Key": "string",
      "Value": "string"
   } ],
   "ConnectionDraining": {
      "Enabled": boolean,
      "Timeout": number
   },
   "ConnectionSettings": {
      "IdleTimeout": number
   },
   "CrossZoneLoadBalancing": { 
      "Enabled": boolean
   }
},
"LoadBalancerName": "string",
"Policies": {
   "AppCookieStickinessPolicies": [ {
      "CookieName": "string",
      "PolicyName": "string"
   } ],
   "LbCookieStickinessPolicies": [ {
      "CookieExpirationPeriod": number,
      "PolicyName": "string"
   } ],
   "OtherPolicies": [ "string" ]
},
"Scheme": "string",
"SecurityGroups": [ "string" ],
"SourceSecurityGroup": { 
      "GroupName": "string",
      "OwnerAlias": "string"
   },
"Subnets": [ "string" ],
"VpcId": "string"
"AwsElbv2LoadBalancer": {
   "AvailabilityZones": [ {
      "SubnetId": "string",
      "ZoneName": "string"
   } ]
}
"CanonicalHostedZoneId": "string",
"CreatedTime": "string",
"DNSName": "string",
"IpAddressType": "string",
"LoadBalancerAttributes": [
  {
    "Key": "string",
    "Value": "string"
  }
],
"Scheme": "string",
"SecurityGroups": [ "string" ],
"State": {
  "Code": "string",
  "Reason": "string"
},
"Type": "string",
"VpcId": "string"
],
"AwsEventSchemasRegistry": {
  "Description": "string",
  "RegistryArn": "string",
  "RegistryName": "string"
},
"AwsGuardDutyDetector": {
  "DataSources": {
    "CloudTrail": {
      "Status": "string"
    },
    "DnsLogs": {
      "Status": "string"
    },
    "FlowLogs": {
      "Status": "string"
    },
    "Kubernetes": {
      "AuditLogs": {
        "Status": "string"
      }
    },
    "MalwareProtection": {
      "ScanEc2InstanceWithFindings": {
        "EbsVolumes": {
          "Reason": "string",
          "Status": "string"
        }
      },
      "ServiceRole": "string"
    },
    "S3Logs": {
      "Status": "string"
    }
  },
  "Features": [
    {
      "Name": "string",
      "Status": "string"
    }
  ],
  "FindingPublishingFrequency": "string",
  "ServiceRole": "string",
  "Status": "string"
},
"AwsIamAccessKey": {
  "AccessKeyId": "string",
  "AccountId": "string"}
"CreatedAt": "string",
"PrincipalId": "string",
"PrincipalName": "string",
"PrincipalType": "string",
"SessionContext": {
  "Attributes": {
    "CreationDate": "string",
    "MfaAuthenticated": boolean
  },
  "SessionIssuer": {
    "AccountId": "string",
    "Arn": "string",
    "PrincipalId": "string",
    "Type": "string",
    "UserName": "string"
  }
},
"Status": "string",
"UserName": "string"
},
"AwsIamGroup": {
  "AttachedManagedPolicies": [
    {
      "PolicyArn": "string",
      "PolicyName": "string"
    }
  ],
  "CreateDate": "string",
  "GroupId": "string",
  "GroupName": "string",
  "GroupPolicyList": [
    {
      "PolicyName": "string"
    }
  ],
  "Path": "string"
},
"AwsIamPolicy": {
  "AttachmentCount": number,
  "CreateDate": "string",
  "DefaultVersionId": "string",
  "Description": "string",
  "IsAttachable": boolean,
  "Path": "string",
  "PermissionsBoundaryUsageCount": number,
  "PolicyId": "string",
  "PolicyName": "string",
  "PolicyVersionList": [
    {
      "CreateDate": "string",
      "IsDefaultVersion": boolean,
      "VersionId": "string"
    }
  ],
  "UpdateDate": "string"
},
"AwsIamRole": {
  "AssumeRolePolicyDocument": "string",
  "AttachedManagedPolicies": [
    {
      "PolicyArn": "string",
      "PolicyName": "string"
    }
  ],
  "CreateDate": "string",
  "InstanceProfileList": [
### Request Syntax

```json
{
  "Arn": "string",
  "CreateDate": "string",
  "InstanceProfileId": "string",
  "InstanceProfileName": "string",
  "Path": "string",
  "Roles": [
    {
      "Arn": "string",
      "AssumeRolePolicyDocument": "string",
      "CreateDate": "string",
      "Path": "string",
      "RoleId": "string",
      "RoleName": "string"
    }
  ],
  "MaxSessionDuration": number,
  "Path": "string",
  "PermissionsBoundary": {
    "PermissionsBoundaryArn": "string",
    "PermissionsBoundaryType": "string"
  },
  "RoleId": "string",
  "RoleName": "string",
  "RolePolicyList": [
    {
      "PolicyName": "string"
    }
  ],
  "AwsIamUser": {
    "AttachedManagedPolicies": [
      {
        "PolicyArn": "string",
        "PolicyName": "string"
      }
    ],
    "CreateDate": "string",
    "GroupList": [ "string" ],
    "Path": "string",
    "PermissionsBoundary": {
      "PermissionsBoundaryArn": "string",
      "PermissionsBoundaryType": "string"
    },
    "UserId": "string",
    "UserName": "string",
    "UserPolicyList": [
      {
        "PolicyName": "string"
      }
    ],
    "AwsKinesisStream": {
      "Arn": "string",
      "Name": "string",
      "RetentionPeriodHours": number,
      "ShardCount": number,
      "StreamEncryption": {
        "EncryptionType": "string",
        "KeyId": "string"
      }
    },
    "AwsKmsKey": {
      "AWSAccountId": "string",
      "Arn": "string",
      "KeyId": "string",
      "KeyArn": "string",
      "KeyUsage": "string",
      "KeyVersionId": "string"
    }
  }
}
```

---

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"CreationDate": number,
"Description": "string",
"KeyId": "string",
"KeyManager": "string",
"KeyRotationStatus": boolean,
"KeyState": "string",
"Origin": "string"
},
"AwsLambdaFunction": {
  "Architectures": [ "string" ],
  Code": {
    "S3Bucket": "string",
    "S3Key": "string",
    "S3ObjectVersion": "string",
    "ZipFile": "string"
  },
  "CodeSha256": "string",
  "DeadLetterConfig": {
    "TargetArn": "string"
  },
  "Environment": {
    "Error": {
      "ErrorCode": "string",
      "Message": "string"
    },
    "Variables": {
      "string": "string"
    }
  },
  "FunctionName": "string",
  "Handler": "string",
  "KmsKeyArn": "string",
  "LastModified": "string",
  "Layers": [
    { "Arn": "string",
      "CodeSize": number
    }
  ],
  "MasterArn": "string",
  "MemorySize": number,
  "PackageType": "string",
  "RevisionId": "string",
  "Role": "string",
  "Runtime": "string",
  "Timeout": number,
  "TracingConfig": {
    "Mode": "string"
  },
  "Version": "string",
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "string" ],
    "VpcId": "string"
  }
},
"AwsLambdaLayerVersion": {
  "CompatibleRuntimes": [ "string" ],
  "CreatedDate": "string",
  "Version": number
},
"AwsNetworkFirewallFirewall": {
  "DeleteProtection": boolean,
  "Description": "string",
  "FirewallArn": "string",
  "FirewallId": "string",
  "DeleteProtection": boolean,
  "Description": "string",
  "FirewallArn": "string",
  "FirewallId": "string"
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"FirewallName": "string",
"FirewallPolicyArn": "string",
"FirewallPolicyChangeProtection": boolean,
"SubnetChangeProtection": boolean,
"SubnetMappings": [
  {
    "SubnetId": "string"
  }
],
"VpcId": "string",
"AwsNetworkFirewallFirewallPolicy": {
  "Description": "string",
  "FirewallPolicy": {
    "StatefulRuleGroupReferences": [
      {
        "ResourceArn": "string"
      }
    ],
    "StatelessCustomActions": [
      {
        "ActionDefinition": {
          "PublishMetricAction": {
            "Dimensions": [
              {
                "Value": "string"
              }
            ]
          }
        }
      }
    ],
    "ActionName": "string"
  },
  "StatelessDefaultActions": [ "string" ],
  "StatelessFragmentDefaultActions": [ "string" ],
  "StatelessRuleGroupReferences": [
    {
      "Priority": number,
      "ResourceArn": "string"
    }
  ],
  "FirewallPolicyArn": "string",
  "FirewallPolicyId": "string",
  "FirewallPolicyName": "string"
},
"AwsNetworkFirewallRuleGroup": {
  "Capacity": number,
  "Description": "string",
  "RuleGroup": {
    "RulesSource": {
      "RulesSourceList": {
        "GeneratedRulesType": "string",
        "Targets": [ "string" ],
        "TargetTypes": [ "string" ]
      },
      "RulesString": "string",
      "StatefulRules": [
        {
          "Action": "string",
          "Header": {
            "Destination": "string",
            "DestinationPort": "string",
            "Direction": "string",
            "Protocol": "string",
            "Source": "string"
          }
        }
      ]
    }
  }
}
"SourcePort": "string",
"RuleOptions": [
  {
    "Keyword": "string",
    "Settings": [ "string" ]
  }
],
"StatelessRulesAndCustomActions": {
  "CustomActions": [
    {
      "ActionDefinition": {
        "PublishMetricAction": {
          "Dimensions": [
            { "Value": "string"
          ]
        },
        "ActionName": "string"
      },
      "StatelessRules": [
        {
          "Priority": number,
          "RuleDefinition": {
            "Actions": [ "string" ],
            "MatchAttributes": {
              "DestinationPorts": [
                { "FromPort": number,
                  "ToPort": number
              ]
            },
            "Destinations": [
              { "AddressDefinition": "string"
            },
            "Protocols": [ number ],
            "SourcePorts": [
              { "FromPort": number,
                "ToPort": number
            ]
          },
          "Sources": [
            { "AddressDefinition": "string"
          },
          "TcpFlags": [
            { "Flags": [ "string" ],
              "Masks": [ "string" ]
            ]
          }
        ]
      }
    }
  ]
}
"RuleVariables": {
  "IpSets": {
    "Definition": [ "string" ]
  },
  "PortSets": {
    "Definition": [ "string" ]
  }
},

"RuleGroupArn": "string",
"RuleGroupId": "string",
"RuleGroupName": "string",
"Type": "string"
},

"AwsOpenSearchServiceDomain": {
  "AccessPolicies": "string",
  "AdvancedSecurityOptions": {
    "Enabled": boolean,
    "InternalUserDatabaseEnabled": boolean,
    "MasterUserOptions": {
      "MasterUserArn": "string",
      "MasterUserName": "string",
      "MasterUserPassword": "string"
    }
  },
  "Arn": "string",
  "ClusterConfig": {
    "DedicatedMasterCount": number,
    "DedicatedMasterEnabled": boolean,
    "DedicatedMasterType": "string",
    "InstanceCount": number,
    "InstanceType": "string",
    "WarmCount": number,
    "WarmEnabled": boolean,
    "WarmType": "string",
    "ZoneAwarenessConfig": {
      "AvailabilityZoneCount": number
    },
    "ZoneAwarenessEnabled": boolean
  },
  "DomainEndpoint": "string",
  "DomainEndpointOptions": {
    "CustomEndpoint": "string",
    "CustomEndpointCertificateArn": "string",
    "CustomEndpointEnabled": boolean,
    "EnforceHTTPS": boolean,
    "TLSSecurityPolicy": "string"
  },
  "DomainEndpoints": {
    "string": "string"
  },
  "DomainName": "string",
  "EncryptionAtRestOptions": {
    "Enabled": boolean,
    "KmsKeyId": "string"
  },
  "EngineVersion": "string",
  "Tld": "string",
  "LogPublishingOptions": {
    "AuditLogs": {
      "CloudWatchLogsLogGroupArn": "string",
      "Enabled": boolean
    },
    "IndexSlowLogs": {
      "CloudWatchLogsLogGroupArn": "string",
      "Enabled": boolean
    }
  }
}
"SearchSlowLogs": {
  "CloudWatchLogsLogGroupArn": "string",
  "Enabled": boolean
},

"NodeToNodeEncryptionOptions": {
  "Enabled": boolean
},

"ServiceSoftwareOptions": {
  "AutomatedUpdateDate": "string",
  "Cancellable": boolean,
  "CurrentVersion": "string",
  "Description": "string",
  "NewVersion": "string",
  "OptionalDeployment": boolean,
  "UpdateAvailable": boolean,
  "UpdateStatus": "string"
},

"VpcOptions": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "string" ]
},

"AwsRdsDbCluster": {
  "ActivityStreamStatus": "string",
  "AllocatedStorage": number,
  "AssociatedRoles": [
    { "RoleArn": "string",
      "Status": "string"
    ]
},

"AvailabilityZones": [ "string" ],
"BackupRetentionPeriod": number,
"ClusterCreateTime": "string",
"CopyTagsToSnapshot": boolean,
"CrossAccountClone": boolean,
"CustomEndpoints": [ "string" ],
"DatabaseName": "string",
"DbClusterIdentifier": "string",
"DbClusterMembers": [
  { "DbClusterParameterGroupStatus": "string",
    "DbInstanceIdentifier": "string",
    "IsClusterWriter": boolean,
    "PromotionTier": number
  ]
],

"DbClusterOptionGroupMemberships": [
  { "DbClusterOptionGroupName": "string",
    "Status": "string"
  ]
],

"DbClusterParameterGroup": "string",
"DbClusterResourceId": "string",
"DbSubnetGroup": "string",
"DeletionProtection": boolean,
"DomainMemberships": [
  { "Domain": "string",
    "Fqdn": "string",
    "IamRoleName": "string",
    "Status": "string"
  ]
null,

"EnabledCloudWatchLogsExports": [ "string" ],
"Endpoint": "string",
"Engine": "string",
"EngineMode": "string",
"EngineVersion": "string",
"HostedZoneId": "string",
"HttpEndpointEnabled": boolean,
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"Status": "string",
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"VpcSecurityGroups": [ {
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"AwsRdsDbClusterSnapshot": {
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  "DbClusterSnapshotAttributes": [ {
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  "DbSubnetGroupName": "string",
  "SubnetGroupStatus": "string",
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      "SubnetIdentifier": "string",
      "SubnetStatus": "string"
    }
  ],
  "VpcId": "string"
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"DeletionProtection": boolean,
"DomainMemberships": [
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"EnabledCloudWatchLogsExports": [ "string" ],
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    "StatusType": "string"
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  "ClusterRevisionNumber": "string",
  "ClusterSecurityGroups": [
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      "Status": "string"
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    "ManualSnapshotRetentionPeriod": number,
    "RetentionPeriod": number,
    "SnapshotCopyGrantName": "string"
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  "ClusterSubnetGroupName": "string",
  "ClusterVersion": "string",
  "DBName": "string",
  "DeferredMaintenanceWindows": [
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      "DeferMaintenanceIdentifier": "string",
      "DeferMaintenanceStartTime": "string"
    }
  ],
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    "Status": "string"
  },
  "ElasticResizeNumberOfNodeOptions": "string",
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  "Endpoint": {
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  "EnhancedVpcRouting": boolean,
  "ExpectedNextSnapshotScheduleTime": "string",
  "ExpectedNextSnapshotScheduleTimeStatus": "string",
},
"HsmStatus": { 
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  "HsmConfigurationIdentifier": "string",
  "Status": "string"
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"IamRoles": [
  {
    "ApplyStatus": "string",
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"KmsKeyId": "string",
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  "LastSuccessfulDeliveryTime": "string",
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  "ClusterVersion": "string",
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"ResizeInfo": {
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"RestoreStatus": {
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  "ElapsedTimeInSeconds": number,
  "EstimatedTimeToCompletionInSeconds": number,
  "ProgressInMegabytes": number,
  "SnapshotSizeInMegabytes": number,
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"SnapshotScheduleState": "string",
"VpcId": "string",
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    "VpcSecurityGroupId": "string"
  }
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  "BlockPublicAcls": boolean,
"BlockPublicPolicy": boolean,
"IgnorePublicAcls": boolean,
"RestrictPublicBuckets": boolean
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"AwsS3Bucket": {
"AccessControlList": "string",
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  "Rules": [
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                "Value": "string"
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          "Days": number,
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        }
      ]
    }
  ]
},
"BucketLoggingConfiguration": {
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  "LogFilePrefix": "string"
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"BucketNotificationConfiguration": {
  "Configurations": [
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      "Destination": "string",
      "Events": [ "string" ],
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          "Suffix": "string"
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    }
  ]
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"FilterRules": [
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"Type": "string"
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"BucketVersioningConfiguration": {
  "IsMfaDeleteEnabled": boolean,
  "Status": "string"
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"BucketWebsiteConfiguration": {
  "ErrorDocument": "string",
  "IndexDocumentSuffix": "string",
  "RedirectAllRequestsTo": {
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    "Protocol": "string"
  }
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"RoutingRules": [
  {
    "Condition": {
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      "KeyPrefixEquals": "string"
    },
    "Redirect": {
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      "HttpRedirectCode": "string",
      "Protocol": "string",
      "ReplaceKeyPrefixWith": "string",
      "ReplaceKeyWith": "string"
    }
  }
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"CreatedAt": "string",
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  "ObjectLockEnabled": "string",
  "Rule": {
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      "Days": number,
      "Mode": "string",
      "Years": number
    }
  }
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"OwnerAccountId": "string",
"OwnerId": "string",
"OwnerName": "string",
"PublicAccessBlockConfiguration": {
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  "BlockPublicPolicy": boolean,
  "IgnorePublicAcl": boolean,
  "RestrictPublicBuckets": boolean
},
"ServerSideEncryptionConfiguration": {
  "Rules": [
    {
      "ApplyServerSideEncryptionByDefault": {
        "KMSMasterKeyID": "string",
        "SSEAlgorithm": "string"
      }
    }
  ]
}
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},

/awsS3Object": {
  "contentType": "string",
  "etag": "string",
  "lastModified": "string",
  "serverSideEncryption": "string",
  "sSEKMSKeyId": "string",
  "versionId": "string"
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/awsSageMakerNotebookInstance": {
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  "additionalCodeRepositories": [ "string" ],
  "defaultCodeRepository": "string",
  "directInternetAccess": "string",
  "failureReason": "string",
  "instanceMetadataServiceConfiguration": {
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  },
  "instanceType": "string",
  "kmsKeyId": "string",
  "networkInterfaceId": "string",
  "notebookInstanceArn": "string",
  "notebookInstanceLifecycleConfigName": "string",
  "notebookInstanceName": "string",
  "notebookInstanceStatus": "string",
  "platformIdentifier": "string",
  "roleArn": "string",
  "rootAccess": "string",
  "securityGroups": [ "string" ],
  "subnetId": "string",
  "url": "string",
  "volumeSizeInGB": number
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/awsSecretsManagerSecret": {
  "deleted": boolean,
  "description": "string",
  "kmsKeyId": "string",
  "name": "string",
  "rotationEnabled": boolean,
  "rotationLambdaArn": "string",
  "rotationOccurredWithinFrequency": boolean,
  "rotationRules": {
    "automaticallyAfterDays": number
  }
},

/awsSnsTopic": {
  "applicationSuccessFeedbackRoleArn": "string",
  "firehoseFailureFeedbackRoleArn": "string",
  "firehoseSuccessFeedbackRoleArn": "string",
  "httpFailureFeedbackRoleArn": "string",
  "httpSuccessFeedbackRoleArn": "string",
  "kmsMasterKeyId": "string",
  "owner": "string",
  "sqsFailureFeedbackRoleArn": "string",
  "sqsSuccessFeedbackRoleArn": "string",
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      "protocol": "string"
    }
  ],
  "topicName": "string"
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"AwsSqsQueue": {  
  "DeadLetterTargetArn": "string",
  "KmsDataKeyReusePeriodSeconds": number,
  "KmsMasterKeyId": "string",
  "QueueName": "string"
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"AwsSsmPatchCompliance": {  
  "Patch": {  
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      "CompliantHighCount": number,
      "CompliantInformationalCount": number,
      "CompliantLowCount": number,
      "CompliantMediumCount": number,
      "CompliantUnspecifiedCount": number,
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      "NonCompliantHighCount": number,
      "NonCompliantInformationalCount": number,
      "NonCompliantLowCount": number,
      "NonCompliantMediumCount": number,
      "NonCompliantUnspecifiedCount": number,
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      "PatchBaselineId": "string",
      "PatchGroup": "string",
      "Status": "string"
    }
  }
},

"AwsStepFunctionStateMachine": {  
  "Label": "string",
  "LoggingConfiguration": {  
    "Destinations": [ ]
  },
  "IncludeExecutionData": boolean,
  "Level": "string"
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"AwsWafRateBasedRule": {  
  "MatchPredicates": [  
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      "Negated": boolean,
      "Type": "string"
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    "RuleGroupId": "string",
    "Rules": [
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            "Priority": number,
            "RuleId": "string",
            "Type": "string"
        }
    ]
},
"AwsWafRegionalWebAcl": {
    "DefaultAction": "string",
    "MetricName": "string",
    "Name": "string",
    "RulesList": [
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            },
            "OverrideAction": {
                "Type": "string"
            },
            "Priority": number,
            "RuleId": "string",
            "Type": "string"
        }
    ],
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},
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    "Name": "string",
    "PredicateList": [
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    ]
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      "Priority": number,
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      "Type": "string"
    }
  ]
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"AwsWafv2RuleGroup": {
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  "Id": "string",
  "Name": "string",
  "Rules": [
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          },
          "Captcha": {
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                  "Value": "string"
                }
              ]
            },
            "Count": {
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                    "Value": "string"
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                ]
              }
            }
          },
          "Block": {
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              ]
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          }
        },
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            "ResponseCode": number,
            "ResponseHeaders": [
              {
                "Name": "string",
                "Value": "string"
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            ]
          }
        }
      }
    }
  ]
}

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"Name": "string",
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"Name": "string",
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"Scope": "string",
"VisibilityConfig": {
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  "MetricName": "string",
  "SampledRequestsEnabled": boolean
}

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"AwsWafv2WebAcl": {
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  "Capacity": number,
  "CaptchaConfig": {
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    }
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  },

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      "ResponseCode": number,
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          "Value": "string"
        }
      ]
    }
  }

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"Description": "string",
"Id": "string",
"ManagedbyFirewallManager": boolean,
"Name": "string",
"Rules": [
  {
    "Action": {
      "Allow": {
        "CustomRequestHandling": {
          "InsertHeaders": [
            
          ]
        }
      }
    }
  

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{  
  "Name": "string",
  "Value": "string"
}
]
},
"Block": {  
  "CustomResponse": {
    "CustomResponseBodyKey": "string",
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    "ResponseHeaders": [
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        "Value": "string"
      }
    ]
  },
  "Captcha": {
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      "InsertHeaders": [
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          "Value": "string"
        }
      ]
    },
    "Count": {
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          "Value": "string"
        }
      ]
    }
  },
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    "MetricName": "string",
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  "MetricName": "string",
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  "Name": "string",
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      },
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    ]
  }
}
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],
"OverrideAction": {
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"Type": "string"
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),
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  "KeyId": "string",
  "Status": "string",
  "Type": "string"
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  "ImageId": "string",
  "ImageName": "string",
  "LaunchedAt": "string",
  "Name": "string",
  "Privileged": boolean,
  "VolumeMounts": [
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      "MountPath": "string",
      "Name": "string"
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  "Other": {
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  }
},
"Id": "string",
"Partition": "string",
"Region": "string",
"ResourceRole": "string",
"Tags": {
  "string": "string"
},
"Type": "string"
],
"Sample": boolean,
"SchemaVersion": "string",
"Severity": {
  "Label": "string",
  "Normalized": number,
  "Original": "string",
  "Product": number
},
"SourceUrl": "string",
"ThreatIntelIndicators": [
  {
    "Category": "string",
    "LastObservedAt": "string",
    "Source": "string",
    "SourceUrl": "string",
    "Type": "string",
    "Value": "string"
  }
],
"Threats": [
{  "FilePaths": [  
    {  
      "FileName": "string",
      "FilePath": "string",
      "Hash": "string",
      "ResourceId": "string"
    }  
  ],
  "ItemCount": number,
  "Name": "string",
  "Severity": "string"
  },
  "Title": "string",
  "Types": [ "string" ],
  "UpdatedAt": "string",
  "UserDefinedFields": {
    "string": "string"
  },
  "VerificationState": "string",
  "Vulnerabilities": [  
    {  
      "Cvss": [  
        {  
          "Adjustments": [  
            {  
              "Metric": "string",
              "Reason": "string"
            }  
          ],
          "BaseScore": number,
          "BaseVector": "string",
          "Source": "string",
          "Version": "string"
        }  
      ],
      "FixAvailable": "string",
      "Id": "string",
      "ReferenceUrls": [ "string" ],
      "RelatedVulnerabilities": [ "string" ],
      "Vendor": {  
        "Name": "string",
        "Url": "string",
        "VendorCreatedAt": "string",
        "VendorSeverity": "string",
        "VendorUpdatedAt": "string"
      },
      "VulnerablePackages": [  
        {  
          "Architecture": "string",
          "Epoch": "string",
          "FilePath": "string",
          "FixedInVersion": "string",
          "Name": "string",
          "PackageManager": "string",
          "Release": "string",
          "Remediation": "string",
          "SourceLayerArn": "string",
          "SourceLayerHash": "string",
          "Version": "string"
        }  
      ]  
    }  
  ],
  "Workflow": {  
    "API Version 2018-10-26"}
URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**Findings (p. 30)**

A list of findings to import. To successfully import a finding, it must follow the AWS Security Finding Format. Maximum of 100 findings per request.

Type: Array of AwsSecurityFinding (p. 404) objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

```
{
   "FailedCount": number,
   "FailedFindings": [
   {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "Id": "string"
   }
   ],
   "SuccessCount": number
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FailedCount (p. 91)**

The number of findings that failed to import.

Type: Integer

**FailedFindings (p. 91)**

The list of findings that failed to import.
Type: Array of `ImportFindingsError (p. 457)` objects

**SuccessCount (p. 91)**

The number of findings that were successfully imported.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchUpdateAutomationRules

Updates one or more automation rules based on rule Amazon Resource Names (ARNs) and input parameters.

Request Syntax

```
PATCH /automationrules/update HTTP/1.1
Content-type: application/json

{
  "UpdateAutomationRulesRequestItems": [
    {
      "Actions": [
        {
          "FindingFieldsUpdate": {
            "Confidence": number,
            "Criticality": number,
            "Note": {
              "Text": "string",
              "UpdatedBy": "string"
            },
            "RelatedFindings": [
              {
                "Id": "string",
                "ProductArn": "string"
              }
            ],
          "Severity": {
            "Label": "string",
            "Normalized": number,
            "Product": number
          },
          "Types": [ "string" ],
          "UserDefinedFields": {
            "string": "string"
          },
          "VerificationState": "string",
          "Workflow": {
            "Status": "string"
          }
        }
      },
      "Type": "string"
    }
  ],
  "Criteria": {
    "AwsAccountId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "CompanyName": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceAssociatedStandardsId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ]
  }
}
```

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"LastObservedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",  
      "Value": number  
    },  
    "End": "string",  
    "Start": "string"  
  }  
],  
"NoteText": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"NoteUpdatedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",  
      "Value": number  
    },  
    "End": "string",  
    "Start": "string"  
  }  
],  
"NoteUpdatedBy": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"ProductArn": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"ProductName": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"RecordState": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"RelatedFindingsId": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"RelatedFindingsProductArn": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  }  
],  
"ResourceDetailsOther": [  
  {  
    "Comparison": "string",  
    "Key": "string"  
  }  
]
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URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**UpdateAutomationRulesRequestItems (p. 93)**

An array of ARNs for the rules that are to be updated. Optionally, you can also include `RuleStatus` and `RuleOrder`.

Type: Array of [UpdateAutomationRulesRequestItem (p. 548)] objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "ProcessedAutomationRules": [ "string" ],
    "UnprocessedAutomationRules": [ ...

```
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProcessedAutomationRules (p. 97)**

A list of properly processed rule ARNs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Pattern: .*\S.*

**UnprocessedAutomationRules (p. 97)**

A list of objects containing RuleArn, ErrorCode, and ErrorMessage. This parameter tells you which automation rules the request didn't update and why.

Type: Array of [UnprocessedAutomationRule (p. 544)] objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429
ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchUpdateFindings

Used by Security Hub customers to update information about their investigation into a finding. Requested by administrator accounts or member accounts. Administrator accounts can update findings for their account and their member accounts. Member accounts can update findings for their account.

Updates from BatchUpdateFindings do not affect the value of UpdatedAt for a finding.

Administrator and member accounts can use BatchUpdateFindings to update the following finding fields and objects.

- Confidence
- Criticality
- Note
- RelatedFindings
- Severity
- Types
- UserDefinedFields
- VerificationState
- Workflow

You can configure IAM policies to restrict access to fields and field values. For example, you might not want member accounts to be able to suppress findings or change the finding severity. See Configuring access to BatchUpdateFindings in the AWS Security Hub User Guide.

Request Syntax

```json
PATCH /findings/batchupdate HTTP/1.1
Content-type: application/json

{
    "Confidence": number,
    "Criticality": number,
    "FindingIdentifiers": [
        {
            "Id": "string",
            "ProductArn": "string"
        }
    ],
    "Note": {
        "Text": "string",
        "UpdatedBy": "string"
    },
    "RelatedFindings": [
        {
            "Id": "string",
            "ProductArn": "string"
        }
    ],
    "Severity": {
        "Label": "string",
        "Normalized": number,
        "Product": number
    },
    "Types": [ "string" ],
    "UserDefinedFields": {
```
URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Confidence (p. 100)

The updated value for the finding confidence. Confidence is defined as the likelihood that a finding accurately identifies the behavior or issue that it was intended to identify.

Confidence is scored on a 0-100 basis using a ratio scale, where 0 means zero percent confidence and 100 means 100 percent confidence.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

Criticality (p. 100)

The updated value for the level of importance assigned to the resources associated with the findings.

A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

FindingIdentifiers (p. 100)

The list of findings to update. BatchUpdateFindings can be used to update up to 100 findings at a time.

For each finding, the list provides the finding identifier and the ARN of the finding provider.

Type: Array of AwsSecurityFindingIdentifier (p. 426) objects

Required: Yes

Note (p. 100)

The updated note.

Type: NoteUpdate (p. 478) object

Required: No
**RelatedFindings (p. 100)**

A list of findings that are related to the updated findings.

Type: Array of [RelatedFinding (p. 493)] objects

Required: No

**Severity (p. 100)**

Used to update the finding severity.

Type: [SeverityUpdate (p. 518)] object

Required: No

**Types (p. 100)**

One or more finding types in the format of namespace/category/classifier that classify a finding.

Valid namespace values are as follows.
- Software and Configuration Checks
- TTPs
- Effects
- Unusual Behaviors
- Sensitive Data Identifications

Type: Array of strings

Pattern: .\S.*

Required: No

**UserDefinedFields (p. 100)**

A list of name/value string pairs associated with the finding. These are custom, user-defined fields added to a finding.

Type: String to string map

Key Pattern: .\S.*

Value Pattern: .\S.*

Required: No

**VerificationState (p. 100)**

Indicates the veracity of a finding.

The available values for VerificationState are as follows.
- UNKNOWN – The default disposition of a security finding
- TRUE_POSITIVE – The security finding is confirmed
- FALSE_POSITIVE – The security finding was determined to be a false alarm
- BENIGN_POSITIVE – A special case of TRUE_POSITIVE where the finding doesn't pose any threat, is expected, or both

Type: String

Valid Values: UNKNOWN | TRUE_POSITIVE | FALSE_POSITIVE | BENIGN_POSITIVE

Required: No
Workflow (p. 100)

Used to update the workflow status of a finding.

The workflow status indicates the progress of the investigation into the finding.

Type: WorkflowUpdate (p. 555) object

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "ProcessedFindings": [
    {
      "Id": "string",
      "ProductArn": "string"
    }
  ],
  "UnprocessedFindings": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "FindingIdentifier": {
        "Id": "string",
        "ProductArn": "string"
      }
    }
  ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProcessedFindings (p. 103)**

The list of findings that were updated successfully.

Type: Array of AwsSecurityFindingIdentifier (p. 426) objects

**UnprocessedFindings (p. 103)**

The list of findings that were not updated.

Type: Array of BatchUpdateFindingsUnprocessedFinding (p. 427) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.
HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
BatchUpdateStandardsControlAssociations

For a batch of security controls and standards, this operation updates the enablement status of a control in a standard.

Request Syntax

PATCH /associations HTTP/1.1
Content-type: application/json

{  
  "StandardsControlAssociationUpdates": [  
    {  
      "AssociationStatus": "string",
      "SecurityControlId": "string",
      "StandardsArn": "string",
      "UpdatedReason": "string"
    }
  ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

StandardsControlAssociationUpdates (p. 105)

Updates the enablement status of a security control in a specified standard.

Type: Array of StandardsControlAssociationUpdate (p. 532) objects

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "UnprocessedAssociationUpdates": [  
    {  
      "ErrorCode": "string",
      "ErrorReason": "string",
      "StandardsControlAssociationUpdate": {  
        "AssociationStatus": "string",
        "SecurityControlId": "string",
        "StandardsArn": "string",
        "UpdatedReason": "string"
      }
    }
  ]
}

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Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

UnprocessedAssociationUpdates (p. 105)

A security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) whose enablement status in a specified standard couldn't be updated.

Type: Array of UnprocessedStandardsControlAssociationUpdate (p. 547) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateActionTarget

Creates a custom action target in Security Hub.

You can use custom actions on findings and insights in Security Hub to trigger target actions in Amazon CloudWatch Events.

Request Syntax

POST /actionTargets HTTP/1.1
Content-type: application/json

{   "Description": "string",
    "Id": "string",
    "Name": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Description (p. 108)

The description for the custom action target.

Type: String

Pattern: .\S.*

Required: Yes

Id (p. 108)

The ID for the custom action target. Can contain up to 20 alphanumeric characters.

Type: String

Pattern: .\S.*

Required: Yes

Name (p. 108)

The name of the custom action target. Can contain up to 20 characters.

Type: String

Pattern: .\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ActionTargetArn** (p. 108)

The Amazon Resource Name (ARN) for the custom action target.

- Type: String
- Pattern: .*$\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

- HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

- HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

- HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

- HTTP Status Code: 429

**ResourceConflictException**

The resource specified in the request conflicts with an existing resource.

- HTTP Status Code: 409

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
See Also

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateAutomationRule

Creates an automation rule based on input parameters.

Request Syntax

POST /automationrules/create HTTP/1.1
Content-type: application/json

{
  "Actions": [
    {
      "FindingFieldsUpdate": {
        "Confidence": "number",
        "Criticality": "number",
        "Note": {
          "Text": "string",
          "UpdatedBy": "string"
        },
        "RelatedFindings": [
          {
            "Id": "string",
            "ProductArn": "string"
          }
        ],
        "Severity": {
          "Label": "string",
          "Normalized": "number",
          "Product": "number"
        },
        "Types": [ "string" ],
        "UserDefinedFields": {
          "string": "string"
        },
        "VerificationState": "string",
        "Workflow": {
          "Status": "string"
        }
      }
    },
    "Type": "string"
  ],
  "Criteria": {
    "AwsAccountId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "CompanyName": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceAssociatedStandardsId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceSecurityControlId": [
      {
      }
    ]
  }
}

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"Comparison": "string",
"Value": "string"
],
"ComplianceStatus": [
  
"Comparison": "string",
"Value": "string"
],
"Confidence": [
  
"Eq": number,
"Gte": number,
"Lte": number
],
"CreatedAt": [
  
"DateRange": {
    "Unit": "string",
    "Value": number
  },
  "End": "string",
  "Start": "string"
],
"Criticality": [
  
"Eq": number,
"Gte": number,
"Lte": number
],
"Description": [
  
"Comparison": "string",
"Value": "string"
],
"FirstObservedAt": [
  
"DateRange": {
    "Unit": "string",
    "Value": number
  },
  "End": "string",
  "Start": "string"
],
"GeneratorId": [
  
"Comparison": "string",
"Value": "string"
],
"Id": [
  
"Comparison": "string",
"Value": "string"
],
"LastObservedAt": [
  
"DateRange": {
    "Unit": "string",
    "Value": "string"
  }
"Value": number
],
"End": "string",
"Start": "string"
}
],
"NoteText": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"NoteUpdatedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"NoteUpdatedBy": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"ProductArn": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"ProductName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"RecordState": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"RelatedFindingsId": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"RelatedFindingsProductArn": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceDetailsOther": [  
  {  
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ResourceId": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }
]
{  
"Comparison": "string",
"Value": "string"
}
],
"ResourcePartition": [
{  
"Comparison": "string",
"Value": "string"
}
],
"ResourceRegion": [
{  
"Comparison": "string",
"Value": "string"
}
],
"ResourceTags": [
{  
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ResourceType": [
{  
"Comparison": "string",
"Value": "string"
}
],
"SeverityLabel": [
{  
"Comparison": "string",
"Value": "string"
}
],
"SourceUrl": [
{  
"Comparison": "string",
"Value": "string"
}
],
"Title": [
{  
"Comparison": "string",
"Value": "string"
}
],
"Type": [
{  
"Comparison": "string",
"Value": "string"
}
],
"UpdatedAt": [
{  
"DateRange": {  
"Unit": "string",
"Value": number  
},  
"End": "string",
"Start": "string"
}
],
"UserDefinedFields": [
{  
}  
]
URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**Actions (p. 111)**

One or more actions to update finding fields if a finding matches the conditions specified in Criteria.

Type: Array of AutomationRulesAction (p. 387) objects

Array Members: Fixed number of 1 item.

Required: Yes

**Criteria (p. 111)**

A set of ASFF finding field attributes and corresponding expected values that Security Hub uses to filter findings. If a rule is enabled and a finding matches the conditions specified in this parameter, Security Hub applies the rule action to the finding.

Type: AutomationRulesFindingFilters (p. 393) object

Required: Yes

**Description (p. 111)**

A description of the rule.

Type: String
Pattern: .*\S.*
Required: Yes

**IsTerminal (p. 111)**

Specifies whether a rule is the last to be applied with respect to a finding that matches the rule criteria. This is useful when a finding matches the criteria for multiple rules, and each rule has different actions. If a rule is terminal, Security Hub applies the rule action to a finding that matches the rule criteria and doesn't evaluate other rules for the finding. By default, a rule isn't terminal.

Type: Boolean
Required: No

**RuleName (p. 111)**

The name of the rule.

Type: String
Pattern: .*\S.*
Required: Yes

**RuleOrder (p. 111)**

An integer ranging from 1 to 1000 that represents the order in which the rule action is applied to findings. Security Hub applies rules with lower values for this parameter first.

Type: Integer
Valid Range: Minimum value of 1. Maximum value of 1000.
Required: Yes

**RuleStatus (p. 111)**

Whether the rule is active after it is created. If this parameter is equal to ENABLED, Security Hub starts applying the rule to findings and finding updates after the rule is created. To change the value of this parameter after creating a rule, use BatchUpdateAutomationRules.

Type: String
Valid Values: ENABLED | DISABLED
Required: No

**Tags (p. 111)**

User-defined tags that help you label the purpose of a rule.

Type: String to string map
Map Entries: Maximum number of 50 items.
Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: ^(?!:aws:)[a-zA-Z+-=._/:]+$;
Value Length Constraints: Maximum length of 256.
Required: No
Response Syntax

HTTP/1.1 200
Content-type: application/json
{
    "RuleArn": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**RuleArn (p. 117)**

The Amazon Resource Name (ARN) of the automation rule that you created.

Type: String

Pattern: .\S.*

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)](#).

**AccessDeniedException**

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateFindingAggregator

Used to enable finding aggregation. Must be called from the aggregation Region.

For more details about cross-Region replication, see Configuring finding aggregation in the AWS Security Hub User Guide.

Request Syntax

```plaintext
POST /findingAggregator/create HTTP/1.1
Content-type: application/json

{
  "RegionLinkingMode": "string",
  "Regions": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**RegionLinkingMode (p. 119)**

Indicates whether to aggregate findings from all of the available Regions in the current partition. Also determines whether to automatically aggregate findings from new Regions as Security Hub supports them and you opt into them.

The selected option also determines how to use the Regions provided in the Regions list.

The options are as follows:

- **ALL_REGIONS** - Indicates to aggregate findings from all of the Regions where Security Hub is enabled. When you choose this option, Security Hub also automatically aggregates findings from new Regions as Security Hub supports them and you opt into them.

- **ALL_REGIONS_EXCEPT_SPECIFIED** - Indicates to aggregate findings from all of the Regions where Security Hub is enabled, except for the Regions listed in the Regions parameter. When you choose this option, Security Hub also automatically aggregates findings from new Regions as Security Hub supports them and you opt into them.

- **SPECIFIED_REGIONS** - Indicates to aggregate findings only from the Regions listed in the Regions parameter. Security Hub does not automatically aggregate findings from new Regions.

Type: String

Pattern: .\S.*

Required: Yes

**Regions (p. 119)**

If RegionLinkingMode is ALL_REGIONS_EXCEPT_SPECIFIED, then this is a space-separated list of Regions that do not aggregate findings to the aggregation Region.
If RegionLinkingMode is SPECIFIED_REGIONS, then this is a space-separated list of Regions that do aggregate findings to the aggregation Region.

Type: Array of strings

Pattern: .*\S.*

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "FindingAggregationRegion": "string",
    "FindingAggregatorArn": "string",
    "RegionLinkingMode": "string",
    "Regions": [ "string" ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FindingAggregationRegion (p. 120)**

The aggregation Region.

Type: String

Pattern: .*\S.*

**FindingAggregatorArn (p. 120)**

The ARN of the finding aggregator. You use the finding aggregator ARN to retrieve details for, update, and stop finding aggregation.

Type: String

Pattern: .*\S.*

**RegionLinkingMode (p. 120)**

Indicates whether to link all Regions, all Regions except for a list of excluded Regions, or a list of included Regions.

Type: String

Pattern: .*\S.*

**Regions (p. 120)**

The list of excluded Regions or included Regions.

Type: Array of strings

Pattern: .*\S.*
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

InternalServerError

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateInsight

Creates a custom insight in Security Hub. An insight is a consolidation of findings that relate to a security issue that requires attention or remediation.

To group the related findings in the insight, use the GroupByAttribute.

Request Syntax

```json
POST /insights HTTP/1.1
Content-type: application/json

{
  "Filters": {
    "AwsAccountId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "CompanyName": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceAssociatedStandardsId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceSecurityControlId": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "ComplianceStatus": [
      {
        "Comparison": "string",
        "Value": "string"
      }
    ],
    "Confidence": [
      {
        "Eq": number,
        "Gte": number,
        "Lte": number
      }
    ],
    "CreatedAt": [
      {
        "DateRange": {
          "Unit": "string",
          "Value": number
        },
        "End": "string",
        "Start": "string"
      }
    ],
    "Criticality": [
    
  ]
}```
{ "Eq": number,
  "Gte": number,
  "Lte": number
}

"Description": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsConfidence": [
  { "Eq": number,
    "Gte": number,
    "Lte": number
  }
],

"FindingProviderFieldsCriticality": [
  { "Eq": number,
    "Gte": number,
    "Lte": number
  }
],

"FindingProviderFieldsRelatedFindingsId": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsRelatedFindingsProductArn": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsSeverityLabel": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsSeverityOriginal": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsTypes": [
  { "Comparison": "string",
    "Value": "string"
  }
],

"FirstObservedAt": [
  { "DateRange": {
    "Unit": "string",
    "Value": number
  },
    "End": "string",
    "Start": "string"
  }
]

"GeneratorId": [   {     "Comparison": "string",     "Value": "string"   },   "Id": [     {       "Comparison": "string",       "Value": "string"     }   ],   "Keyword": [     {       "Value": "string"     }   ],   "LastObservedAt": [     {       "DateRange": {         "Unit": "string",         "Value": number       },       "End": "string",       "Start": "string"     }   ],   "MalwareName": [     {       "Comparison": "string",       "Value": "string"     }   ],   "MalwarePath": [     {       "Comparison": "string",       "Value": "string"     }   ],   "MalwareState": [     {       "Comparison": "string",       "Value": "string"     }   ],   "MalwareType": [     {       "Comparison": "string",       "Value": "string"     }   ],   "NetworkDestinationDomain": [     {       "Comparison": "string",       "Value": "string"     }   ],   "NetworkDestinationIpV4": [     {       "Cidr": "string"     }   ],   "NetworkDestinationIpV6": [     {       "Cidr": "string"     }   ]}

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"NetworkDestinationPort": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"NetworkDirection": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
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    "Value": "string"
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],
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    "Value": "string"
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],
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    "Cidr": "string"
  }
],
"NetworkSourceIpV6": [
  {
    "Cidr": "string"
  }
],
"NetworkSourceMac": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
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    "Gte": number,
    "Lte": number
  }
],
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  {
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    "Value": "string"
  }
],
"NoteUpdatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
{  "Comparison": "string",  "Value": "string" }
],  "ProcessLaunchedAt": [
{  "DateRange": {  "Unit": "string",  "Value": number },  "End": "string",  "Start": "string" }
],  "ProcessName": [
{  "Comparison": "string",  "Value": "string" }
],  "ProcessParentPid": [
{  "Eq": number,  "Gte": number,  "Lte": number }
],  "ProcessPath": [
{  "Comparison": "string",  "Value": "string" }
],  "ProcessPid": [
{  "Eq": number,  "Gte": number,  "Lte": number }
],  "ProcessTerminatedAt": [
{  "DateRange": {  "Unit": "string",  "Value": number },  "End": "string",  "Start": "string" }
],  "ProductArn": [
{  "Comparison": "string",  "Value": "string" }
],  "ProductFields": [
{  "Comparison": "string",  "Key": "string",  "Value": "string" }
],  "ProductName": [
}
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<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
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<td>Value: string</td>
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<tr>
<td>RecommendationText: [</td>
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<tr>
<td>Comparison: string</td>
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<tr>
<td>Value: string</td>
<td></td>
</tr>
<tr>
<td>RecordState: [</td>
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</tr>
<tr>
<td>Comparison: string</td>
<td></td>
</tr>
<tr>
<td>Value: string</td>
<td></td>
</tr>
<tr>
<td>Region: [</td>
<td></td>
</tr>
<tr>
<td>Comparison: string</td>
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</tr>
<tr>
<td>Value: string</td>
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<tr>
<td>RelatedFindingsId: [</td>
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</tr>
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<td>Comparison: string</td>
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<td>Value: string</td>
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<td>RelatedFindingsProductArn: [</td>
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</tr>
<tr>
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<td>Value: string</td>
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</tr>
<tr>
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<tr>
<td>Comparison: string</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>ResourceAwsEc2InstanceIpV4Addresses: [</td>
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<tr>
<td>Cidr: string</td>
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<tr>
<td>ResourceAwsEc2InstanceIpV6Addresses: [</td>
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<tr>
<td>Cidr: string</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>Value: string</td>
<td></td>
</tr>
<tr>
<td>ResourceAwsEc2InstanceLaunchedAt: [</td>
<td></td>
</tr>
<tr>
<td>DateRange: [</td>
<td></td>
</tr>
<tr>
<td>Unit: string</td>
<td></td>
</tr>
</tbody>
</table>
"Value": "number",
"End": "string",
"Start": "string"
}]
],
"ResourceAwsEc2InstanceSubnetId": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsEc2InstanceType": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsEc2InstanceVpcId": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsIamAccessKeyCreatedAt": [
{
  "DateRange": {
    "Unit": "string",
    "Value": "number"
  },
  "End": "string",
  "Start": "string"
}
],
"ResourceAwsIamAccessKeyPrincipalName": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsIamAccessKeyStatus": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsIamAccessKeyUserName": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsIamUserUserName": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsS3BucketOwnerId": [
{
  "Comparison": "string",
  "Value": "string"
}
],
"ResourceAwsS3BucketOwnerName": [
{
  "Comparison": "string",
  "Value": "string"
}]
]
"Comparison": "string",
"Value": "string"
],
"ResourceContainerImageId": [
  
],
"ResourceContainerImageName": [
  
],
"ResourceContainerLaunchedAt": [
  
],
"ResourceContainerName": [
  
],
"ResourceDetailsOther": [
  
],
"ResourceId": [
  
],
"ResourcePartition": [
  
],
"ResourceRegion": [
  
],
"ResourceTags": [
  
],
"ResourceType": [
  
]
"Comparison": "string",
"Value": "string"
],
"Sample": [
{
"Value": boolean
}
],
"SeverityLabel": [
{
"Comparison": "string",
"Value": "string"
}
],
"SeverityNormalized": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SeverityProduct": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorCategory": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorLastObservedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ThreatIntelIndicatorSource": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorSourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorType": [
{
"Comparison": "string",
"Value": "string"
}]}
URI Request Parameters

The request does not use any URI parameters.
Request Body

The request accepts the following data in JSON format.

Filters (p. 122)

One or more attributes used to filter the findings included in the insight. The insight only includes findings that match the criteria defined in the filters.

Type: `AwsSecurityFindingFilters (p. 412)` object

Required: Yes

GroupByAttribute (p. 122)

The attribute used to group the findings for the insight. The grouping attribute identifies the type of item that the insight applies to. For example, if an insight is grouped by resource identifier, then the insight produces a list of resource identifiers.

Type: String

Pattern: `.*\S.*`

Required: Yes

Name (p. 122)

The name of the custom insight to create.

Type: String

Pattern: `.*\S.*`

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "InsightArn": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

InsightArn (p. 132)

The ARN of the insight created.

Type: String

Pattern: `.*\S.*`
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceConflictException**

The resource specified in the request conflicts with an existing resource.

HTTP Status Code: 409

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
CreateMembers

Creates a member association in Security Hub between the specified accounts and the account used to make the request, which is the administrator account. If you are integrated with Organizations, then the administrator account is designated by the organization management account.

CreateMembers is always used to add accounts that are not organization members.

For accounts that are managed using Organizations, CreateMembers is only used in the following cases:

- Security Hub is not configured to automatically add new organization accounts.
- The account was disassociated or deleted in Security Hub.

This action can only be used by an account that has Security Hub enabled. To enable Security Hub, you can use the EnableSecurityHub operation.

For accounts that are not organization members, you create the account association and then send an invitation to the member account. To send the invitation, you use the InviteMembers operation. If the account owner accepts the invitation, the account becomes a member account in Security Hub.

Accounts that are managed using Organizations do not receive an invitation. They automatically become a member account in Security Hub.

- If the organization account does not have Security Hub enabled, then Security Hub and the default standards are automatically enabled. Note that Security Hub cannot be enabled automatically for the organization management account. The organization management account must enable Security Hub before the administrator account enables it as a member account.
- For organization accounts that already have Security Hub enabled, Security Hub does not make any other changes to those accounts. It does not change their enabled standards or controls.

A permissions policy is added that permits the administrator account to view the findings generated in the member account.

To remove the association between the administrator and member accounts, use the DisassociateFromMasterAccount or DisassociateMembers operation.

Request Syntax

```
POST /members HTTP/1.1
Content-type: application/json
{
   "AccountDetails": [
      {
         "AccountId": "string",
         "Email": "string"
      }
   ]
}
```

URI Request Parameters

The request does not use any URI parameters.
Request Body

The request accepts the following data in JSON format.

**AccountDetails (p. 134)**

The list of accounts to associate with the Security Hub administrator account. For each account, the list includes the account ID and optionally the email address.

Type: Array of [AccountDetails (p. 376)] objects

Required: Yes

Response Syntax

```json
HTTP/1.1 200
Content-type: application/json

{
    "UnprocessedAccounts": [
        {
            "AccountId": "string",
            "ProcessingResult": "string"
        }
    ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**UnprocessedAccounts (p. 135)**

The list of AWS accounts that were not processed. For each account, the list includes the account ID and the email address.

Type: Array of [Result (p. 509)] objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401
InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceConflictException

The resource specified in the request conflicts with an existing resource.

HTTP Status Code: 409

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeclineInvitations

Declines invitations to become a member account.

A prospective member account uses this operation to decline an invitation to become a member.

This operation is only called by member accounts that aren't part of an organization. Organization accounts don't receive invitations.

Request Syntax

```plaintext
POST /invitations/decline HTTP/1.1
Content-type: application/json

{

    "AccountIds": [ "string" ]

}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**AccountIds (p. 137)**

The list of prospective member account IDs for which to decline an invitation.

Type: Array of strings

Pattern: .\S.*

Required: Yes

Response Syntax

```plaintext
HTTP/1.1 200
Content-type: application/json

{

    "UnprocessedAccounts": [ 

        {

            "AccountId": "string",
            "ProcessingResult": "string"

        }

    ]

}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

**UnprocessedAccounts (p. 137)**

The list of AWS accounts that were not processed. For each account, the list includes the account ID and the email address.

Type: Array of [Result (p. 509)] objects

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- [AWS SDK for .NET](https://aws.amazon.com/sdk-for-net/)
- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-golang/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for JavaScript](https://aws.amazon.com/sdk-for-javascript/)
- [AWS SDK for PHP V3](https://aws.amazon.com/sdk-for-php/)
- [AWS SDK for Python](https://aws.amazon.com/sdk-for-python/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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DeleteActionTarget

Deletes a custom action target from Security Hub.

Deleting a custom action target does not affect any findings or insights that were already sent to Amazon CloudWatch Events using the custom action.

Request Syntax

```
DELETE /actionTargets/{ActionTargetArn} HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**ActionTargetArn** (p. 139)

The Amazon Resource Name (ARN) of the custom action target to delete.

- Pattern: .*\S.*
- Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "ActionTargetArn": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ActionTargetArn** (p. 139)

The ARN of the custom action target that was deleted.

- Type: String
- Pattern: .*\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).
**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DeleteFindingAggregator

Deletes a finding aggregator. When you delete the finding aggregator, you stop finding aggregation. When you stop finding aggregation, findings that were already aggregated to the aggregation Region are still visible from the aggregation Region. New findings and finding updates are not aggregated.

**Request Syntax**

```
DELETE /findingAggregator/delete/FindingAggregatorArn+ HTTP/1.1
```

**URI Request Parameters**

The request uses the following URI parameters.

**FindingAggregatorArn (p. 141)**

The ARN of the finding aggregator to delete. To obtain the ARN, use `ListFindingAggregators`.

- Pattern: `.*\S.*`
- Required: Yes

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 1294)](#).

**AccessDeniedException**

You don't have permission to perform the action specified in the request.

- HTTP Status Code: 403

**InternalException**

Internal server error.

- HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.
HTTP Status Code: 401
InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400
LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429
ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteInsight

Deletes the insight specified by the InsightArn.

Request Syntax

DELETE /insights/InsightArn+ HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

InsightArn (p. 143)

The ARN of the insight to delete.

Pattern: .*\S.*

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "InsightArn": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

InsightArn (p. 143)

The ARN of the insight that was deleted.

Type: String

Pattern: .*\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).
InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteInvitations

Deletes invitations received by the AWS account to become a member account.

A Security Hub administrator account can use this operation to delete invitations sent to one or more member accounts.

This operation is only used to delete invitations that are sent to member accounts that aren't part of an organization. Organization accounts don't receive invitations.

Request Syntax

```plaintext
POST /invitations/delete HTTP/1.1
Content-type: application/json

{
  "AccountIds": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

`AccountIds (p. 145)`

The list of member account IDs that received the invitations you want to delete.

Type: Array of strings

Pattern: .*\S.*

Required: Yes

Response Syntax

```plaintext
HTTP/1.1 200
Content-type: application/json

{
  "UnprocessedAccounts": [
    {
      "AccountId": "string",
      "ProcessingResult": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteMembers

Deletes the specified member accounts from Security Hub.

Can be used to delete member accounts that belong to an organization as well as member accounts that were invited manually.

Request Syntax

```
POST /members/delete HTTP/1.1
Content-type: application/json

{
    "AccountIds": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**AccountIds (p. 148)**

The list of account IDs for the member accounts to delete.

Type: Array of strings

Pattern: .*\S.*

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "UnprocessedAccounts": [
        {
            "AccountId": "string",
            "ProcessingResult": "string"
        }
    ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

API Version 2018-10-26
UnprocessedAccounts (p. 148)

The list of AWS accounts that were not deleted. For each account, the list includes the account ID and the email address.

Type: Array of Result (p. 509) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeActionTargets

Returns a list of the custom action targets in Security Hub in your account.

Request Syntax

POST /actionTargets/get HTTP/1.1
Content-type: application/json

{
  "ActionTargetArns": ["string"],
  "MaxResults": number,
  "NextToken": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

ActionTargetArns (p. 150)

A list of custom action target ARNs for the custom action targets to retrieve.

  Type: Array of strings
  Pattern: .\S. *
  Required: No

MaxResults (p. 150)

The maximum number of results to return.

  Type: Integer
  Valid Range: Minimum value of 1. Maximum value of 100.
  Required: No

NextToken (p. 150)

The token that is required for pagination. On your first call to the DescribeActionTargets operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

  Type: String
  Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "ActionTargets": [
      {
         "ActionTargetArn": "string",
         "Description": "string",
         "Name": "string"
      }
   ],
   "NextToken": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ActionTargets (p. 150)**

A list of ActionTarget objects. Each object includes the ActionTargetArn, Description, and Name of a custom action target available in Security Hub.

Type: Array of ActionTarget (p. 383) objects

**NextToken (p. 150)**

The pagination token to use to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeHub

Returns details about the Hub resource in your account, including the HubArn and the time when you enabled Security Hub.

Request Syntax

GET /accounts?HubArn=HubArn HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

HubArn (p. 153)

The ARN of the Hub resource to retrieve.

Pattern: .*\S.*

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "AutoEnableControls": boolean,
   "ControlFindingGenerator": "string",
   "HubArn": "string",
   "SubscribedAt": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AutoEnableControls (p. 153)

Whether to automatically enable new controls when they are added to standards that are enabled.

If set to true, then new controls for enabled standards are enabled automatically. If set to false, then new controls are not enabled.

Type: Boolean

ControlFindingGenerator (p. 153)

Specifies whether the calling account has consolidated control findings turned on. If the value for this field is set to SECURITY_CONTROL, Security Hub generates a single finding for a control check even when the check applies to multiple enabled standards.
If the value for this field is set to STANDARD_CONTROL, Security Hub generates separate findings for a control check when the check applies to multiple enabled standards.

The value for this field in a member account matches the value in the administrator account. For accounts that aren't part of an organization, the default value of this field is SECURITY_CONTROL if you enabled Security Hub on or after February 23, 2023.

Type: String

Valid Values: STANDARD_CONTROL  |  SECURITY_CONTROL

HubArn (p. 153)

The ARN of the Hub resource that was retrieved.

Type: String

Pattern: .*\S.*

SubscribedAt (p. 153)

The date and time when Security Hub was enabled in the account.

Type: String

Pattern: .*\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeOrganizationConfiguration

Returns information about the Organizations configuration for Security Hub. Can only be called from a Security Hub administrator account.

Request Syntax

GET /organization/configuration HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "AutoEnable": boolean,
  "AutoEnableStandards": "string",
  "MemberAccountLimitReached": boolean
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AutoEnable (p. 156)

Whether to automatically enable Security Hub for new accounts in the organization.

If set to true, then Security Hub is enabled for new accounts. If set to false, then new accounts are not added automatically.

Type: Boolean

AutoEnableStandards (p. 156)

Whether to automatically enable Security Hub default standards for new member accounts in the organization.

The default value of this parameter is equal to DEFAULT.

If equal to DEFAULT, then Security Hub default standards are automatically enabled for new member accounts. If equal to NONE, then default standards are not automatically enabled for new member accounts.

Type: String
Valid Values: NONE  |  DEFAULT

**MemberAccountLimitReached (p. 156)**

Whether the maximum number of allowed member accounts are already associated with the Security Hub administrator account.

Type: Boolean

## Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DescribeProducts

Returns information about product integrations in Security Hub.

You can optionally provide an integration ARN. If you provide an integration ARN, then the results only include that integration.

If you do not provide an integration ARN, then the results include all of the available product integrations.

Request Syntax

GET /products?MaxResults=MaxResults&NextToken=NextToken&ProductArn=ProductArn  HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 158)

The maximum number of results to return.

Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 158)

The token that is required for pagination. On your first call to the DescribeProducts operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

ProductArn (p. 158)

The ARN of the integration to return.

Pattern: .*\S.*

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "NextToken": "string",
    "Products": [
        {
            "ActivationUrl": "string",
            "Categories": [ "string" ],
            "CompanyName": "string",
            "Description": "string",
            "IntegrationTypes": [ "string" ]
        }
    ]
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response. The following data is returned in JSON format by the service.

**NextToken (p. 158)**

The pagination token to use to request the next page of results.

Type: String

**Products (p. 158)**

A list of products, including details for each product.

Type: Array of [Product (p. 488)] objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeStandards

Returns a list of the available standards in Security Hub.
For each standard, the results include the standard ARN, the name, and a description.

Request Syntax

GET /standards?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 161)

The maximum number of standards to return.
Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 161)

The token that is required for pagination. On your first call to the DescribeStandards operation, set the value of this parameter to NULL.
For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "NextToken": "string",
   "Standards": [
      {
         "Description": "string",
         "EnabledByDefault": boolean,
         "Name": "string",
         "StandardsArn": "string",
         "StandardsManagedBy": {
            "Company": "string",
            "Product": "string"
         }
      }
   ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

**NextToken (p. 161)**

The pagination token to use to request the next page of results.

Type: String

**Standards (p. 161)**

A list of available standards.

Type: Array of Standard (p. 523) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DescribeStandardsControls

Returns a list of security standards controls.

For each control, the results include information about whether it is currently enabled, the severity, and a link to remediation information.

Request Syntax

```
GET /standards/controls/StandardsSubscriptionArn+?MaxResults=MaxResults&NextToken=NextToken
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**MaxResults (p. 163)**

The maximum number of security standard controls to return.

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken (p. 163)**

The token that is required for pagination. On your first call to the DescribeStandardsControls operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

**StandardsSubscriptionArn (p. 163)**

The ARN of a resource that represents your subscription to a supported standard. To get the subscription ARNs of the standards you have enabled, use the GetEnabledStandards operation.

Pattern: .*
Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "Controls": [
    {
      "ControlId": "string",
      "ControlStatus": "string",
      "ControlStatusUpdatedAt": "string",
      "Description": "string",
      "DisabledReason": "string",
    }
  ]
}
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Controls** *(p. 163)*

A list of security standards controls.

Type: Array of StandardsControl *(p. 525)* objects

**NextToken** *(p. 163)*

The pagination token to use to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors *(p. 1294)*.

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
See Also

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DisableImportFindingsForProduct

Disables the integration of the specified product with Security Hub. After the integration is disabled, findings from that product are no longer sent to Security Hub.

Request Syntax

DELETE /productSubscriptions/\ProductSubscriptionArn\ HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

ProductSubscriptionArn (p. 166)

The ARN of the integrated product to disable the integration for.

Pattern: .*/S.*/

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.
HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DisableOrganizationAdminAccount

Disables a Security Hub administrator account. Can only be called by the organization management account.

Request Syntax

POST /organization/admin/disable HTTP/1.1
Content-type: application/json

{
   "AdminAccountId": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AdminAccountId (p. 168)

The AWS account identifier of the Security Hub administrator account.

Type: String

Pattern: .\S.*

Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalServerError

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.
HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DisableSecurityHub

Disables Security Hub in your account only in the current Region. To disable Security Hub in all Regions, you must submit one request per Region where you have enabled Security Hub.

When you disable Security Hub for an administrator account, it doesn't disable Security Hub for any associated member accounts.

When you disable Security Hub, your existing findings and insights and any Security Hub configuration settings are deleted after 90 days and cannot be recovered. Any standards that were enabled are disabled, and your administrator and member account associations are removed.

If you want to save your existing findings, you must export them before you disable Security Hub.

Request Syntax

```
DELETE /accounts HTTP/1.1
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DisassociateFromAdministratorAccount

Disassociates the current Security Hub member account from the associated administrator account.

This operation is only used by accounts that are not part of an organization. For organization accounts, only the administrator account can disassociate a member account.

Request Syntax

POST /administrator/disassociate HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DisassociateFromMasterAccount

This method is deprecated. Instead, use DisassociateFromAdministratorAccount.

The Security Hub console continues to use DisassociateFromMasterAccount. It will eventually change to use DisassociateFromAdministratorAccount. Any IAM policies that specifically control access to this function must continue to use DisassociateFromMasterAccount. You should also add DisassociateFromAdministratorAccount to your policies to ensure that the correct permissions are in place after the console begins to use DisassociateFromAdministratorAccount.

Disassociates the current Security Hub member account from the associated administrator account.

This operation is only used by accounts that are not part of an organization. For organization accounts, only the administrator account can disassociate a member account.

Request Syntax

POST /master/disassociate HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.
HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
DisassociateMembers

Disassociates the specified member accounts from the associated administrator account. Can be used to disassociate both accounts that are managed using Organizations and accounts that were invited manually.

Request Syntax

POST /members/disassociate HTTP/1.1
Content-type: application/json

{
   "AccountIds": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AccountIds (p. 176)

The account IDs of the member accounts to disassociate from the administrator account.

Type: Array of strings

Pattern: .\S.*

Required: Yes

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500
InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
EnableImportFindingsForProduct

Enables the integration of a partner product with Security Hub. Integrated products send findings to Security Hub.

When you enable a product integration, a permissions policy that grants permission for the product to send findings to Security Hub is applied.

Request Syntax

```
POST /productSubscriptions HTTP/1.1
Content-type: application/json
{
    "ProductArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**ProductArn (p. 178)**

The ARN of the product to enable the integration for.

Type: String

Pattern: \.*\S.*

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
    "ProductSubscriptionArn": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**ProductSubscriptionArn (p. 178)**

The ARN of your subscription to the product to enable integrations for.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceConflictException**

The resource specified in the request conflicts with an existing resource.

HTTP Status Code: 409

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
EnableOrganizationAdminAccount

Designates the Security Hub administrator account for an organization. Can only be called by the organization management account.

**Request Syntax**

```plaintext
POST /organization/admin/enable HTTP/1.1
Content-type: application/json

{
    "AdminAccountId": "string"
}
```

**URI Request Parameters**

The request does not use any URI parameters.

**Request Body**

The request accepts the following data in JSON format.

- **AdminAccountId** *(p. 180)*
  
  The AWS account identifier of the account to designate as the Security Hub administrator account.
  
  Type: String
  
  Pattern: .*\S.*
  
  Required: Yes

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 1294)](common-errors-1294).

- **InternalException**
  
  Internal server error.
  
  HTTP Status Code: 500

- **InvalidAccessException**
  
  The account doesn't have permission to perform this action.
AWS Security Hub API Reference

See Also

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
EnableSecurityHub

Enables Security Hub for your account in the current Region or the Region you specify in the request.

When you enable Security Hub, you grant to Security Hub the permissions necessary to gather findings from other services that are integrated with Security Hub.

When you use the EnableSecurityHub operation to enable Security Hub, you also automatically enable the following standards:

- Center for Internet Security (CIS) AWS Foundations Benchmark v1.2.0
- AWS Foundational Security Best Practices

Other standards are not automatically enabled.

To opt out of automatically enabled standards, set EnableDefaultStandards to false.

After you enable Security Hub, to enable a standard, use the BatchEnableStandards operation. To disable a standard, use the BatchDisableStandards operation.

To learn more, see the setup information in the AWS Security Hub User Guide.

Request Syntax

POST /accounts HTTP/1.1
Content-type: application/json

{
  "ControlFindingGenerator": "string",
  "EnableDefaultStandards": boolean,
  "Tags": {
    "string" : "string"
  }
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**ControlFindingGenerator (p. 182)**

This field, used when enabling Security Hub, specifies whether the calling account has consolidated control findings turned on. If the value for this field is set to SECURITY_CONTROL, Security Hub generates a single finding for a control check even when the check applies to multiple enabled standards.

If the value for this field is set to STANDARD_CONTROL, Security Hub generates separate findings for a control check when the check applies to multiple enabled standards.

The value for this field in a member account matches the value in the administrator account. For accounts that aren’t part of an organization, the default value of this field is SECURITY_CONTROL if you enabled Security Hub on or after February 23, 2023.

API Version 2018-10-26
Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.
HTTP Status Code: 401

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceConflictException

The resource specified in the request conflicts with an existing resource.

HTTP Status Code: 409

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetAdministratorAccount

Provides the details for the Security Hub administrator account for the current member account. Can be used by both member accounts that are managed using Organizations and accounts that were invited manually.

Request Syntax

GET /administrator HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "Administrator": {  
    "AccountId": "string",
    "InvitationId": "string",
    "InvitedAt": "string",
    "MemberStatus": "string"
  }
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response. The following data is returned in JSON format by the service.

Administrator (p. 185)

Details about an invitation.

Type: Invitation (p. 461) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.
HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetEnabledStandards

Returns a list of the standards that are currently enabled.

Request Syntax

```
POST /standards/get HTTP/1.1
Content-type: application/json

{
    "MaxResults": number,
    "NextToken": "string",
    "StandardsSubscriptionArns": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

*MaxResults (p. 187)*

The maximum number of results to return in the response.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

*NextToken (p. 187)*

The token that is required for pagination. On your first call to the GetEnabledStandards operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Type: String

Required: No

*StandardsSubscriptionArns (p. 187)*

The list of the standards subscription ARNs for the standards to retrieve.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: .*\S.*

Required: No
Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "NextToken": "string",
  "StandardsSubscriptions": [
    {
      "StandardsArn": "string",
      "StandardsInput": {
        "string": "string"
      },
      "StandardsStatus": "string",
      "StandardsStatusReason": {
        "StatusReasonCode": "string"
      },
      "StandardsSubscriptionArn": "string"
    }
  ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

*NextToken (p. 188)*

The pagination token to use to request the next page of results.

Type: String

*StandardsSubscriptions (p. 188)*

The list of StandardsSubscriptions objects that include information about the enabled standards.

Type: Array of StandardsSubscription (p. 535) objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.
HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
GetFindingAggregator

Returns the current finding aggregation configuration.

Request Syntax

GET /findingAggregator/get/<FindingAggregatorArn> HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

**FindingAggregatorArn (p. 190)**

The ARN of the finding aggregator to return details for. To obtain the ARN, use ListFindingAggregators.

Pattern: .*

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "FindingAggregationRegion": "string",
   "FindingAggregatorArn": "string",
   "RegionLinkingMode": "string",
   "Regions": [ "string" ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FindingAggregationRegion (p. 190)**

The aggregation Region.

Type: String

Pattern: .*

**FindingAggregatorArn (p. 190)**

The ARN of the finding aggregator.
Type: String
Pattern: .*\S.*

RegionLinkingMode (p. 190)
Indicates whether to link all Regions, all Regions except for a list of excluded Regions, or a list of included Regions.
Type: String
Pattern: .*\S.*

Regions (p. 190)
The list of excluded Regions or included Regions.
Type: Array of strings
Pattern: .*\S.*

Errors
For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException
You don't have permission to perform the action specified in the request.
HTTP Status Code: 403

InternalException
Internal server error.
HTTP Status Code: 500

InvalidAccessException
The account doesn't have permission to perform this action.
HTTP Status Code: 401

InvalidInputException
The request was rejected because you supplied an invalid or out-of-range value for an input parameter.
HTTP Status Code: 400

LimitExceededException
The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

ResourceNotFoundException
The request was rejected because we can't find the specified resource.
HTTP Status Code: 404
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetFindingHistory

Returns history for a Security Hub finding in the last 90 days. The history includes changes made to any fields in the AWS Security Finding Format (ASFF).

Request Syntax

```json
POST /findingHistory/get HTTP/1.1
Content-type: application/json
{
  "EndTime": "string",
  "FindingIdentifier": {
    "Id": "string",
    "ProductArn": "string"
  },
  "MaxResults": number,
  "NextToken": "string",
  "StartTime": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**EndTime (p. 193)**

An ISO 8601-formatted timestamp that indicates the end time of the requested finding history. A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6).

If you provide values for both StartTime and EndTime, Security Hub returns finding history for the specified time period. If you provide a value for StartTime but not for EndTime, Security Hub returns finding history from the StartTime to the time at which the API is called. If you provide a value for EndTime but not for StartTime, Security Hub returns finding history from the CreatedAt timestamp of the finding to the EndTime. If you provide neither StartTime nor EndTime, Security Hub returns finding history from the CreatedAt timestamp of the finding to the time at which the API is called. In all of these scenarios, the response is limited to 100 results, and the maximum time period is limited to 90 days.

Type: Timestamp

Required: No

**FindingIdentifier (p. 193)**

Identifies which finding to get the finding history for.

Type: `AwsSecurityFindingIdentifier (p. 426)` object

Required: Yes
MaxResults (p. 193)

The maximum number of results to be returned. If you don't provide it, Security Hub returns up to 100 results of finding history.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 193)

A token for pagination purposes. Provide NULL as the initial value. In subsequent requests, provide the token included in the response to get up to an additional 100 results of finding history. If you don't provide NextToken, Security Hub returns up to 100 results of finding history for each request.

Type: String

Required: No

StartTime (p. 193)

An ISO 8601-formatted timestamp that indicates the start time of the requested finding history. A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

If you provide values for both StartTime and EndTime, AWS Security Hub returns finding history for the specified time period. If you provide a value for StartTime but not for EndTime, Security Hub returns finding history from the StartTime to the time at which the API is called. If you provide a value for EndTime but not for StartTime, Security Hub returns finding history from the CreatedAt timestamp of the finding to the EndTime. If you provide neither StartTime nor EndTime, Security Hub returns finding history from the CreatedAt timestamp of the finding to the time at which the API is called. In all of these scenarios, the response is limited to 100 results, and the maximum time period is limited to 90 days.

Type: Timestamp

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
  "NextToken": "string",
  "Records": [
    {
      "FindingCreated": boolean,
      "FindingIdentifier": {
        "Id": "string",
        "ProductArn": "string"
      },
      "NextToken": "string",
      "Updates": [
        {
          "NewValue": "string",
          "OldValue": "string"
        }
      ]
    }
  ]
}
```

API Version 2018-10-26
The following data is returned in JSON format by the service.

**NextToken (p. 194)**

A token for pagination purposes. Provide this token in the subsequent request to `GetFindingsHistory` to get up to an additional 100 results of history for the same finding that you specified in your initial request.

Type: String

**Records (p. 194)**

A list of events that altered the specified finding during the specified time period.

Type: Array of `FindingHistoryRecord (p. 448)` objects

### Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)](#).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetFindings

Returns a list of findings that match the specified criteria.

If finding aggregation is enabled, then when you call GetFindings from the aggregation Region, the results include all of the matching findings from both the aggregation Region and the linked Regions.

Request Syntax

```
POST /findings HTTP/1.1
Content-type: application/json

{
    "Filters": {
        "AwsAccountId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "CompanyName": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceAssociatedStandardsId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceSecurityControlId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceStatus": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "Confidence": [
            {
                "Eq": number,
                "Gte": number,
                "Lte": number
            }
        ],
        "CreatedAt": [
            {
                "DateRange": {
                    "Unit": "string",
                    "Value": number
                },
                "End": "string",
                "Start": "string"
            }
        ],
        "Criticality": [
            {
            }
        ]
    }
}
```

{  
  "Comparison": "string",
  "Value": "string"
}
],
"Id": [
  
  "Comparison": "string",
  "Value": "string"

],
"Keyword": [
  
  "Value": "string"
]
],
"LastObservedAt": [
  
  "DateRange": {
    "Unit": "string",
    "Value": number
  },
  "End": "string",
  "Start": "string"
]
],
"MalwareName": [
  
  "Comparison": "string",
  "Value": "string"
]
],
"MalwarePath": [
  
  "Comparison": "string",
  "Value": "string"
]
],
"MalwareState": [
  
  "Comparison": "string",
  "Value": "string"
]
],
"MalwareType": [
  
  "Comparison": "string",
  "Value": "string"
]
],
"NetworkDestinationDomain": [
  
  "Comparison": "string",
  "Value": "string"
]
],
"NetworkDestinationIpV4": [
  
  "Cidr": "string"
]
],
"NetworkDestinationIpV6": [
  
  "Cidr": "string"
]
],
"NetworkDestinationPort": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"NetworkDirection": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkProtocol": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkSourceDomain": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkSourceIpV4": [
  {
    "Cidr": "string"
  }
],
"NetworkSourceIpV6": [
  {
    "Cidr": "string"
  }
],
"NetworkSourceMac": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkSourcePort": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"NoteText": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NoteUpdatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"NoteUpdatedBy": [null]
"Comparison": "string",
"Value": "string"
],
"ProcessLaunchedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ProcessName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ProcessParentPid": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"ProcessPath": [
{
"Comparison": "string",
"Value": "string"
}
],
"ProcessPid": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"ProcessTerminatedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ProductArn": [
{
"Comparison": "string",
"Value": "string"
}
],
"ProductFields": [
{
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ProductName": [
"Comparison": "string",
"Value": "string"
]
"Value": "string"
],
"RecommendationText": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"RecordState": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"Region": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"RelatedFindingsId": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"RelatedFindingsProductArn": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"ResourceAwsEc2InstanceIamInstanceProfileArn": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"ResourceAwsEc2InstanceKeyName": [
{
 "Comparison": "string",
 "Value": "string"
}
],
"ResourceAwsEc2InstanceLaunchedAt": [
{
 "DateRange": {
 "Unit": "string",
 "Value": number
}
}
GET /aws/securityhub/resource

Request Syntax

```
{  "resources": [    {    "ResourceAwsEc2InstanceSubnetId": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsEc2InstanceType": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsEc2InstanceVpcId": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsIamAccessKeyCreatedAt": [      {        "DateRange": {          "Unit": "string",          "Value": number        },        "End": "string",        "Start": "string"      }    ],    "ResourceAwsIamAccessKeyPrincipalName": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsIamAccessKeyStatus": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsIamAccessKeyUserName": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsIamUserUserName": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsS3BucketOwnerId": [      {        "Comparison": "string",        "Value": "string"      }    ],    "ResourceAwsS3BucketOwnerName": [      {        "Comparison": "string",        "Value": "string"      }    ]  ]}
```

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203
"Value": "string"
]}],
"ResourceContainerImageId": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceContainerImageName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceContainerLaunchedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ResourceContainerName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceDetailsOther": [
{
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ResourceId": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourcePartition": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceRegion": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceTags": [
{
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ResourceType": [
{
"Comparison": "string",
"Value": "string"
}
]
"Value": "string"
],
"Sample": [
{
"Value": boolean
}
],
"SeverityLabel": [
{
"Comparison": "string",
"Value": "string"
}
],
"SeverityNormalized": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SeverityProduct": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorCategory": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorLastObservedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ThreatIntelIndicatorSource": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorSourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorType": [
{
"Comparison": "string",
"Value": "string"
}
"ThreatIntelIndicatorValue": [  
  {  
    "Comparison": "string",  
    "Value": "string"  
  },  
  "Title": [  
    {  
      "Comparison": "string",  
      "Value": "string"  
    }  
  ],  
  "Type": [  
    {  
      "Comparison": "string",  
      "Value": "string"  
    }  
  ],  
  "UpdatedAt": [  
    {  
      "DateRange": {  
        "Unit": "string",  
        "Value": number  
      },  
      "End": "string",  
      "Start": "string"  
    },  
    {  
      "Comparison": "string",  
      "Key": "string",  
      "Value": "string"  
    }  
  ],  
  "VerificationState": [  
    {  
      "Comparison": "string",  
      "Value": "string"  
    }  
  ],  
  "WorkflowState": [  
    {  
      "Comparison": "string",  
      "Value": "string"  
    }  
  ],  
  "WorkflowStatus": [  
    {  
      "Comparison": "string",  
      "Value": "string"  
    }  
  ],  
  "MaxResults": number,  
  "NextToken": "string",  
  "SortCriteria": [  
    {  
      "Field": "string",  
      "SortOrder": "string"  
    }  
  ]}
URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Filters (p. 197)

The finding attributes used to define a condition to filter the returned findings.

You can filter by up to 10 finding attributes. For each attribute, you can provide up to 20 filter values.

Note that in the available filter fields, WorkflowState is deprecated. To search for a finding based on its workflow status, use WorkflowStatus.

Type: AwsSecurityFindingFilters (p. 412) object

Required: No

MaxResults (p. 197)

The maximum number of findings to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 197)

The token that is required for pagination. On your first call to the GetFindings operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Type: String

Required: No

SortCriteria (p. 197)

The finding attributes used to sort the list of returned findings.

Type: Array of SortCriterion (p. 522) objects

Required: No

Response Syntax

HTTP/1.1 200
Content-type: application/json

```json
{
    "Findings": [
        
    ]
```

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207
"Action": {
  "ActionType": "string",
  "AwsApiCallAction": {
    "AffectedResources": {
      "string": "string"
    },
    "Api": "string",
    "CallerType": "string",
    "DomainDetails": {
      "Domain": "string"
    },
    "FirstSeen": "string",
    "LastSeen": "string",
    "RemoteIpDetails": {
      "City": {
        "CityName": "string"
      },
      "Country": {
        "CountryCode": "string",
        "CountryName": "string"
      },
      "GeoLocation": {
        "Lat": number,
        "Lon": number
      },
      "IpAddressV4": "string",
      "Organization": {
        "Asn": number,
        "AsnOrg": "string",
        "Isp": "string",
        "Org": "string"
      }
    },
    "ServiceName": "string"
  },
  "DnsRequestAction": {
    "Blocked": boolean,
    "Domain": "string",
    "Protocol": "string"
  },
  "NetworkConnectionAction": {
    "Blocked": boolean,
    "ConnectionDirection": "string",
    "LocalPortDetails": {
      "Port": number,
      "PortName": "string"
    },
    "Protocol": "string",
    "RemoteIpDetails": {
      "City": {
        "CityName": "string"
      },
      "Country": {
        "CountryCode": "string",
        "CountryName": "string"
      },
      "GeoLocation": {
        "Lat": number,
        "Lon": number
      },
      "IpAddressV4": "string",
      "Organization": {
        "Asn": number,
        "AsnOrg": "string",
        "Isp": "string",
        "Org": "string"
      }
    }
  }
}
{ "RemotePortDetails": {   "Port": number,   "PortName": "string" } }, "PortProbeAction": {   "Blocked": boolean,   "PortProbeDetails": [    {      "LocalIpDetails": {        "IpAddressV4": "string"      },      "LocalPortDetails": {        "Port": number,        "PortName": "string"      },      "RemoteIpDetails": {        "City": {          "CityName": "string"        },        "Country": {          "CountryCode": "string",          "CountryName": "string"        },        "GeoLocation": {          "Lat": number,          "Lon": number        },        "IpAddressV4": "string",        "Organization": {          "Asn": number,          "AsnOrg": "string",          "Isp": "string",          "Org": "string"        }      }    }  ], "AwsAccountId": "string", "CompanyName": "string", "Compliance": {   "AssociatedStandards": [    {      "StandardsId": "string"    }  ],   "RelatedRequirements": [    "string"  ],   "SecurityControlId": "string",   "Status": "string",   "StatusReasons": [    {      "Description": "string",      "ReasonCode": "string"    }  ] } }, "Confidence": number, "CreatedAt": "string", "Criticality": number, "Description": "string", "FindingProviderFields": {   "Confidence": number,
"Criticality": number,
"RelatedFindings": [
    {
        "Id": "string",
        "ProductArn": "string"
    }
],
"Severity": {
    "Label": "string",
    "Original": "string"
},
"Types": [ "string" ]
},
"FirstObservedAt": "string",
"GeneratorId": "string",
"Id": "string",
"LastObservedAt": "string",
"Malware": [
    {
        "Name": "string",
        "Path": "string",
        "State": "string",
        "Type": "string"
    }
],
"Network": {
    "DestinationDomain": "string",
    "DestinationIpV4": "string",
    "DestinationIpV6": "string",
    "DestinationPort": number,
    "Direction": "string",
    "OpenPortRange": {
        "Begin": number,
        "End": number
    },
    "Protocol": "string",
    "SourceDomain": "string",
    "SourceIpV4": "string",
    "SourceIpV6": "string",
    "SourceMac": "string",
    "SourcePort": number
},
"NetworkPath": [
    {
        "ComponentId": "string",
        "ComponentType": "string",
        "Egress": {
            "Destination": {
                "Address": [ "string" ],
                "PortRanges": [
                    {
                        "Begin": number,
                        "End": number
                    }
                ]
            },
            "Protocol": "string",
            "Source": {
                "Address": [ "string" ],
                "PortRanges": [
                    {
                        "Begin": number,
                        "End": number
                    }
                ]
            }
        }
    }
]
"Ingress": {
    "Destination": {
        "Address": [ "string" ],
        "PortRanges": [
            { "Begin": number,
            "End": number
        ]
    },
    "Protocol": "string",
    "Source": {
        "Address": [ "string" ],
        "PortRanges": [
            { "Begin": number,
            "End": number
        ]
    }
},
"Note": {
    "Text": "string",
    "UpdatedAt": "string",
    "UpdatedBy": "string"
},
"PatchSummary": {
    "FailedCount": number,
    "Id": "string",
    "InstalledCount": number,
    "InstalledOtherCount": number,
    "InstalledPendingReboot": number,
    "InstalledRejectedCount": number,
    "MissingCount": number,
    "Operation": "string",
    "OperationEndTime": "string",
    "OperationStartTime": "string",
    "RebootOption": "string"
},
"Process": {
    "LaunchedAt": "string",
    "Name": "string",
    "ParentPid": number,
    "Path": "string",
    "Pid": number,
    "TerminatedAt": "string"
},
"ProductArn": "string",
"ProductFields": {
    "string": "string"
},
"ProductName": "string",
"RecordState": "string",
"Region": "string",
"RelatedFindings": [
    { "Id": "string",
    "ProductArn": "string"
}]
,"Remediation": {
    "Recommendation": {
        "Text": "string",
    }
}}
"Url": "string"
},
"Resources": [
{
"DataClassification": {
"DetailedResultsLocation": "string",
"Result": {
"AdditionalOccurrences": boolean,
"CustomDataIdentifiers": {
"Detections": [ {
"Arn": "string",
"Count": number,
"Name": "string",
"Occurrences": {
"Cells": [
{ "CellReference": "string",
"Column": number,
"ColumnName": "string",
"Row": number
}],
"LineRanges": [ {
"End": number,
"Start": number,
"StartColumn": number
}],
"OffsetRanges": [ {
"End": number,
"Start": number,
"StartColumn": number
}],
"Pages": [ {
"LineRange": {
"End": number,
"Start": number,
"StartColumn": number
}],
"OffsetRange": { 
"End": number,
"Start": number,
"StartColumn": number
}],
"PageNumber": number
}],
"Records": [ 
{ "JsonPath": "string",
"RecordIndex": number
}
]
}],
"TotalCount": number
},
"MimeType": "string",
"SensitiveData": [
AWS Security Hub API Reference
Response Syntax

```
{
    "Category": "string",
    "Detections": [
        {
            "Count": number,
            "Occurrences": {
                "Cells": [
                    {
                        "CellReference": "string",
                        "Column": number,
                        "ColumnName": "string",
                        "Row": number
                    }
                ],
                "LineRanges": [
                    {
                        "End": number,
                        "Start": number,
                        "StartColumn": number
                    }
                ],
                "OffsetRanges": [
                    {
                        "End": number,
                        "Start": number,
                        "StartColumn": number
                    }
                ],
                "Pages": [
                    {
                        "LineRange": {
                            "End": number,
                            "Start": number,
                            "StartColumn": number
                        },
                        "OffsetRange": {
                            "End": number,
                            "Start": number,
                            "StartColumn": number
                        },
                        "LineNumber": number
                    }
                ],
                "Records": [
                    {
                        "JsonPath": "string",
                        "RecordIndex": number
                    }
                ],
            },
            "Type": "string"
        }
    ],
    "TotalCount": number
},
"sizeClassified": number,
"Status": {
    "Code": "string",
    "Reason": "string"
}
}
}
"Details": {
    "AwsAmazonMqBroker": {
        "AuthenticationStrategy": "string",
```
"AutoMinorVersionUpgrade": boolean,
"BrokerArn": "string",
"BrokerId": "string",
"BrokerName": "string",
"DeploymentMode": "string",
"EncryptionOptions": {
  "KmsKeyId": "string",
  "UseAwsOwnedKey": boolean
},
"EngineType": "string",
"EngineVersion": "string",
"HostInstanceType": "string",
"LdapServerMetadata": {
  "Hosts": [ "string" ],
  "RoleBase": "string",
  "RoleName": "string",
  "RoleSearchMatching": "string",
  "RoleSearchSubtree": boolean,
  "ServiceAccountUsername": "string",
  "UserBase": "string",
  "UserRoleName": "string",
  "UserSearchMatching": "string",
  "UserSearchSubtree": boolean
},
"Logs": {
  "Audit": boolean,
  "AuditLogGroup": "string",
  "General": boolean,
  "GeneralLogGroup": "string",
  "Pending": {
    "Audit": boolean,
    "General": boolean
  }
},
"MaintenanceWindowStartTime": {
  "DayOfWeek": "string",
  "TimeOfDay": "string",
  "TimeZone": "string"
},
"PubliclyAccessible": boolean,
"SecurityGroups": [ "string" ],
"StorageType": "string",
"SubnetIds": [ "string" ],
"Users": [
  {
    "PendingChange": "string",
    "Username": "string"
  }
],
"AwsApiGatewayRestApi": {
  "ApiKeySource": "string",
  "BinaryMediaTypes": [ "string" ],
  "CreatedDate": "string",
  "Description": "string",
  "EndpointConfiguration": {
    "Types": [ "string" ]
  },
  "Id": "string",
  "MinimumCompressionSize": number,
  "Name": "string",
  "Version": "string"
},
"AwsApiGatewayStage": {
  "AccessLogSettings": {
    "DestinationArn": "string",
    "LogLevel": "string",
    "LogFormat": "string",
    "LogTypeId": "string"
  }
}
"Response Syntax"

"Format": "string",
"CacheClusterEnabled": boolean,
"CacheClusterSize": "string",
"CacheClusterStatus": "string",
"CanarySettings": {
  "DeploymentId": "string",
  "PercentTraffic": number,
  "StageVariableOverrides": {
    "string": "string"
  },
  "UseStageCache": boolean
},
"ClientCertificateId": "string",
"CreatedDate": "string",
"DeploymentId": "string",
"Description": "string",
"DocumentationVersion": "string",
"LastUpdatedDate": "string",
"MethodSettings": [
  {
    "CacheDataEncrypted": boolean,
    "CacheTtlInSeconds": number,
    "CachingEnabled": boolean,
    "DataTraceEnabled": boolean,
    "HttpMethod": "string",
    "LoggingLevel": "string",
    "MetricsEnabled": boolean,
    "RequireAuthorizationForCacheControl": boolean,
    "ResourcePath": "string",
    "ThrottlingBurstLimit": number,
    "ThrottlingRateLimit": number,
    "UnauthorizedCacheControlHeaderStrategy": "string"
  }
],
"StageName": "string",
"TracingEnabled": boolean,
"Variables": {
  "string": "string"
},
"WebAclArn": "string"
},
"AwsApiGatewayV2Api": {
  "ApiEndpoint": "string",
  "ApiId": "string",
  "ApiKeySelectionExpression": "string",
  "CorsConfiguration": {
    "AllowCredentials": boolean,
    "AllowHeaders": [ "string" ],
    "AllowMethods": [ "string" ],
    "AllowOrigins": [ "string" ],
    "ExposeHeaders": [ "string" ],
    "MaxAge": number
  },
  "CreatedDate": "string",
  "Description": "string",
  "Name": "string",
  "ProtocolType": "string",
  "RouteSelectionExpression": "string",
  "Version": "string"
},
"AwsApiGatewayV2Stage": {
  "AccessLogSettings": {
    "DestinationARN": "string",
    "Format": "string"
  },
  "ApiId": "string",
  "ApiVersion": "string",
  "ApiDestinationARN": "string",
  "ApiStageArn": "string",
  "ApiStageName": "string",
  "ApiVersionStageArn": "string",
  "ApiVersionStageArnFromArn": "string",
  "CanarySettings": {
    "DeploymentId": "string",
    "PercentTraffic": number,
    "StageVariableOverrides": {
      "string": "string"
    },
    "UseStageCache": boolean
  },
  "ClientCertificateId": "string",
  "CreatedDate": "string",
  "DeploymentId": "string",
  "Description": "string",
  "DocumentationVersion": "string",
  "LastUpdatedDate": "string",
  "MethodSettings": [
    {
      "CacheDataEncrypted": boolean,
      "CacheTtlInSeconds": number,
      "CachingEnabled": boolean,
      "DataTraceEnabled": boolean,
      "HttpMethod": "string",
      "LoggingLevel": "string",
      "MetricsEnabled": boolean,
      "RequireAuthorizationForCacheControl": boolean,
      "ResourcePath": "string",
      "ThrottlingBurstLimit": number,
      "ThrottlingRateLimit": number,
      "UnauthorizedCacheControlHeaderStrategy": "string"
    }
  ],
  "StageName": "string",
  "TracingEnabled": boolean,
  "Variables": {
    "string": "string"
  },
  "WebAclArn": "string"
"ApiGatewayManaged": boolean,
"AutoDeploy": boolean,
"ClientCertificateId": "string",
"CreatedDate": "string",
"DefaultRouteSettings": {
  "DataTraceEnabled": boolean,
  "DetailedMetricsEnabled": boolean,
  "LoggingLevel": "string",
  "ThrottlingBurstLimit": number,
  "ThrottlingRateLimit": number
},
"DeploymentId": "string",
"Description": "string",
"LastDeploymentStatusMessage": "string",
"LastUpdatedDate": "string",
"RouteSettings": {
  "DataTraceEnabled": boolean,
  "DetailedMetricsEnabled": boolean,
  "LoggingLevel": "string",
  "ThrottlingBurstLimit": number,
  "ThrottlingRateLimit": number
},
"StageName": "string",
"StageVariables": {
  "string": "string"
}
},
"AwsAppSyncGraphQlApi": {
  "AdditionalAuthenticationProviders": [ 
    { 
      "AuthenticationType": "string",
      "LambdaAuthorizerConfig": { 
        "AuthorizerResultTtlInSeconds": number,
        "AuthorizerUri": "string",
        "IdentityValidationExpression": "string"
      },
      "OpenIdConnectConfig": { 
        "AuthTtl": number,
        "ClientId": "string",
        "IatTtl": number,
        "Issuer": "string"
      },
      "UserPoolConfig": { 
        "AppIdClientRegex": "string",
        "AwsRegion": "string",
        "DefaultAction": "string",
        "UserPoolId": "string"
      }
    }
  ],
  "ApiId": "string",
  "Arn": "string",
  "AuthenticationType": "string",
  "Id": "string",
  "LambdaAuthorizerConfig": { 
    "AuthorizerResultTtlInSeconds": number,
    "AuthorizerUri": "string",
    "IdentityValidationExpression": "string"
  },
  "LogConfig": {
    "CloudWatchLogsRoleArn": "string",
    "ExcludeVerboseContent": boolean,
    "FieldLogLevel": "string"
  },
  "Name": "string",
  "OpenIdConnectConfig": {

"AuthTtl": number,
"ClientId": "string",
"IatTtl": number,
"Issuer": "string"
},
"UserPoolConfig": {
  "AppIdClientRegex": "string",
  "AwsRegion": "string",
  "DefaultAction": "string",
  "UserPoolId": "string"
},
"WafWebAclArn": "string",
"XrayEnabled": boolean
},
"AwsAthenaWorkGroup": {
  "Configuration": {
    "ResultConfiguration": {
      "EncryptionConfiguration": {
        "EncryptionOption": "string",
        "KmsKey": "string"
      }
    }
  },
  "Description": "string",
  "Name": "string",
  "State": "string"
},
"AwsAutoScalingAutoScalingGroup": {
  "AvailabilityZones": [
    {
      "Value": "string"
    }
  ],
  "CapacityRebalance": boolean,
  "CreatedTime": "string",
  "HealthCheckGracePeriod": number,
  "HealthCheckType": "string",
  "LaunchConfigurationName": "string",
  "LaunchTemplate": {
    "LaunchTemplateId": "string",
    "LaunchTemplateName": "string",
    "Version": "string"
  },
  "LoadBalancerNames": [ "string" ],
  "MixedInstancesPolicy": {
    "InstancesDistribution": {
      "OnDemandAllocationStrategy": "string",
      "OnDemandBaseCapacity": number,
      "OnDemandPercentageAboveBaseCapacity": number,
      "SpotAllocationStrategy": "string",
      "SpotInstancePools": number,
      "SpotMaxPrice": "string"
    },
    "LaunchTemplate": {
      "LaunchTemplateSpecification": {
        "LaunchTemplateId": "string",
        "LaunchTemplateName": "string",
        "Version": "string"
      },
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"AwsIamRole": {  
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247
"AwsLambdaLayerVersion": {  
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        "Settings": [ "string" ]
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    "RoleName": "string"
  }  
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"FeatureName": "string",
"RoleArn": "string",
"Status": "string"
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      "SubnetStatus": "string"
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"Read Replica Source DB Instance Identifier": "string",
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  "Status": "string"
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"Protocol": "string"
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{
"Condition": {
"HttpErrorCodeReturnedEquals": "string",
"KeyPrefixEquals": "string"
},
"Redirect": {
"Hostname": "string",
"HttpRedirectCode": "string",
"Protocol": "string",
"ReplaceKeyPrefixWith": "string",
"ReplaceKeyWith": "string"
}
}
],
"CreatedAt": "string",
"ObjectLockConfiguration": {
"ObjectLockEnabled": "string",
"Rule": {
"DefaultRetention": {
"Days": number,
"Mode": "string",
"Years": number
}
}
},
"OwnerAccountId": "string",
"OwnerId": "string",
"OwnerName": "string",
"PublicAccessBlockConfiguration": {
"BlockPublicAcls": boolean,
"BlockPublicPolicy": boolean,
"IgnorePublicAcls": boolean,
"RestrictPublicBuckets": boolean
},
"ServerSideEncryptionConfiguration": {
"Rules": [
{
"ApplyServerSideEncryptionByDefault": {
"KMSMasterKeyId": "string",
"SSEAlgorithm": "string"
}
}
]
}
},
"AwsS3Object": {
"ContentType": "string",
"ETag": "string",
"LastModified": "string",
"ServerSideEncryption": "string",
"SSEKMSKeyId": "string",
"VersionId": "string"
}
},
"AwsSageMakerNotebookInstance": {
"AcceleratorTypes": [ "string" ],
"AdditionalCodeRepositories": [ "string" ],
"DefaultCodeRepository": "string",
"DirectInternetAccess": "string",
"FailureReason": "string",
"InstanceMetadataServiceConfiguration": {
"MinimumInstanceMetadataServiceVersion": "string"
}
},
"InstanceType": "string",
"KmsKeyId": "string",
"NetworkInterfaceId": "string",
"NotebookInstanceArn": "string",
"NotebookInstanceLifecycleConfigName": "string",
"NotebookInstanceName": "string",
"NotebookInstanceStatus": "string",
"PlatformIdentifier": "string",
"RoleArn": "string",
"RootAccess": "string",
"SecurityGroups": [ "string" ],
"SubnetId": "string",
"Url": "string",
"VolumeSizeInGB": number
}
},
"AwsSecretsManagerSecret": {
"Deleted": boolean,
"Description": "string",
"KmsKeyId": "string",
"Name": "string",
"RotationEnabled": boolean,
"RotationLambdaArn": "string",
"RotationOccurredWithinFrequency": boolean,
"RotationRules": {
"AutomaticallyAfterDays": number
}
}
},
"AwsSnsTopic": {
"ApplicationSuccessFeedbackRoleArn": "string",
"FirehoseFailureFeedbackRoleArn": "string",
"FirehoseSuccessFeedbackRoleArn": "string",
"HttpFailureFeedbackRoleArn": "string",
"HttpSuccessFeedbackRoleArn": "string",
"KmsMasterKeyId": "string",
"Owner": "string"
}
"SqsFailureFeedbackRoleArn": "string",
"SqsSuccessFeedbackRoleArn": "string",
"Subscription": [
  {
    "Endpoint": "string",
    "Protocol": "string"
  }
],
"TopicName": "string"
},
"AwsSqsQueue": {
  "DeadLetterTargetArn": "string",
  "KmsDataKeyReusePeriodSeconds": number,
  "KmsMasterKeyId": "string",
  "QueueName": "string"
},
"AwsSsmPatchCompliance": {
  "Patch": {
    "ComplianceSummary": {
      "ComplianceType": "string",
      "CompliantCriticalCount": number,
      "CompliantHighCount": number,
      "CompliantInformationalCount": number,
      "CompliantLowCount": number,
      "CompliantMediumCount": number,
      "CompliantUnspecifiedCount": number,
      "ExecutionType": "string",
      "NonCompliantCriticalCount": number,
      "NonCompliantHighCount": number,
      "NonCompliantInformationalCount": number,
      "NonCompliantLowCount": number,
      "NonCompliantMediumCount": number,
      "NonCompliantUnspecifiedCount": number,
      "OverallSeverity": "string",
      "PatchBaselineId": "string",
      "PatchGroup": "string",
      "Status": "string"
    }
  }
},
"AwsStepFunctionStateMachine": {
  "Label": "string",
  "LoggingConfiguration": {
    "Destinations": [
      {
        "CloudWatchLogsLogGroup": {
          "LogGroupArn": "string"
        }
      }
    ],
    "IncludeExecutionData": boolean,
    "Level": "string"
  },
  "Name": "string",
  "RoleArn": "string",
  "StateMachineArn": "string",
  "Status": "string",
  "TracingConfiguration": {
    "Enabled": boolean
  },
  "Type": "string"
},
"AwsWafRateBasedRule": {
  "MatchPredicates": [
    {
      "DataId": "string",
      "DataValues": [number]
    }
  ]
}
"Negated": boolean,
"Type": "string"
},
"MetricName": "string",
"Name": "string",
"RateKey": "string",
"RateLimit": number,
"RuleId": "string"
},
"AwsWafRegionalRateBasedRule": {
"MatchPredicates": [
  {
    "DataId": "string",
    "Negated": boolean,
    "Type": "string"
  }
],
"MetricName": "string",
"Name": "string",
"RateKey": "string",
"RateLimit": number,
"RuleId": "string"
},
"AwsWafRegionalRule": {
"MetricName": "string",
"Name": "string",
"PredicateList": [
  {
    "DataId": "string",
    "Negated": boolean,
    "Type": "string"
  }
],
"RuleId": "string"
},
"AwsWafRegionalRuleGroup": {
"MetricName": "string",
"Name": "string",
"RuleGroupId": "string",
"Rules": [
  {
    "Action": {
      "Type": "string"
    },
    "Priority": number,
    "RuleId": "string",
    "Type": "string"
  }
]
},
"AwsWafRegionalWebAcl": {
"DefaultAction": "string",
"MetricName": "string",
"Name": "string",
"RulesList": [
  {
    "Action": {
      "Type": "string"
    },
    "OverrideAction": {
      "Type": "string"
    },
    "Priority": number,
    "RuleId": "string",
    "Type": "string"
  }
]
},
  "WebAclId": "string"
},
  "AwsWafRule": {
    "MetricName": "string",
    "Name": "string",
    "PredicateList": [
      {
        "DataId": "string",
        "Negated": boolean,
        "Type": "string"
      }
    ],
    "RuleId": "string"
  },
  "AwsWafRuleGroup": {
    "MetricName": "string",
    "Name": "string",
    "RuleGroupId": "string",
    "Rules": [
      {
        "Action": {
          "Type": "string"
        },
        "Priority": number,
        "RuleId": "string",
        "Type": "string"
      }
    ]
  },
  "AwsWafv2RuleGroup": {
    "Arn": "string",
    "Capacity": number,
    "Description": "string",
    "Id": "string",
    "Name": "string",
    "Rules": [
      {
        "Action": {
          "Allow": {
            "CustomRequestHandling": {
              "InsertHeaders": [
                {
                  "Name": "string",
                  "Value": "string"
                }
              ]
            }
          },
          "Block": {
            "CustomResponse": {
              "CustomResponseBodyKey": "string",
              "ResponseCode": number,
              "ResponseHeaders": [
                {
                  "Name": "string",
                  "Value": "string"
                }
              ]
            },
            "Captcha": {
              "CustomRequestHandling": {
                "InsertHeaders": [
                {
                  "Name": "string",
                  "Value": "string"
                }
              ]
            }
          }
        }
      }
    ]
  }
}
"Name": "string",
"Value": "string"
] } ]
},
"Count": {
"CustomRequestHandling": {
"InsertHeaders": [
{
"Name": "string",
"Value": "string"
}
]
},
"Name": "string",
"OverrideAction": "string",
"Priority": number,
"VisibilityConfig": {
"CloudWatchMetricsEnabled": boolean,
"MetricName": "string",
"SampledRequestsEnabled": boolean
}
}
],
"Scope": "string",
"VisibilityConfig": {
"CloudWatchMetricsEnabled": boolean,
"MetricName": "string",
"SampledRequestsEnabled": boolean
}
},
"AwsWafv2WebAcl": {
"Arn": "string",
"Capacity": number,
"CaptchaConfig": {
"ImmunityTimeProperty": {
"ImmunityTime": number
}
},
"DefaultAction": {
"Allow": {
"CustomRequestHandling": {
"InsertHeaders": [
{
"Name": "string",
"Value": "string"
}
]
},
"Block": {
"CustomResponse": {
"CustomResponseBodyKey": "string",
"ResponseCode": number,
"ResponseHeaders": [
{
"Name": "string",
"Value": "string"
}
]
}
}
},
"VisibilityConfig": {
"CloudWatchMetricsEnabled": boolean,
"MetricName": "string",
"SampledRequestsEnabled": boolean
}
}
"Description": "string",
"Id": "string",
"ManagedbyFirewallManager": boolean,
"Name": "string",
"Rules": [
  {
    "Action": {
      "Allow": {
        "CustomRequestHandling": {
          "InsertHeaders": [
            {
              "Name": "string",
              "Value": "string"
            }
          ]
        }
      },
      "Block": {
        "CustomResponse": {
          "CustomResponseBodyKey": "string",
          "ResponseCode": number,
          "ResponseHeaders": [
            {
              "Name": "string",
              "Value": "string"
            }
          ]
        }
      },
      "Captcha": {
        "CustomRequestHandling": {
          "InsertHeaders": [
            {
              "Name": "string",
              "Value": "string"
            }
          ]
        }
      },
      "Count": {
        "CustomRequestHandling": {
          "InsertHeaders": [
            {
              "Name": "string",
              "Value": "string"
            }
          ]
        }
      }
    },
    "Name": "string",
    "OverrideAction": "string",
    "Priority": number,
    "VisibilityConfig": {
      "CloudWatchMetricsEnabled": boolean,
      "MetricName": "string",
      "SampledRequestsEnabled": boolean
    }
  }
],
"VisibilityConfig": {
  "CloudWatchMetricsEnabled": boolean,
  "MetricName": "string",
  "SampledRequestsEnabled": boolean
},
]
"AwsWafWebAcl": {
  "DefaultAction": "string",
  "Name": "string",
  "Rules": [
    {
      "Action": {
        "Type": "string"
      },
      "ExcludedRules": [
        {
          "RuleId": "string"
        }
      ],
      "OverrideAction": {
        "Type": "string"
      },
      "Priority": number,
      "RuleId": "string",
      "Type": "string"
    }
  ],
  "WebAclId": "string"
},
"AwsXrayEncryptionConfig": {
  "KeyId": "string",
  "Status": "string",
  "Type": "string"
},
"Container": {
  "ContainerRuntime": "string",
  "ImageId": "string",
  "ImageName": "string",
  "LaunchedAt": "string",
  "Name": "string",
  "Privileged": boolean,
  "VolumeMounts": [
    {
      "MountPath": "string",
      "Name": "string"
    }
  ],
  "Other": {
    "string": "string"
  }
},
"Id": "string",
"Partition": "string",
"Region": "string",
"ResourceRole": "string",
"Tags": {
  "string": "string"
},
"Type": "string"
},
"Sample": boolean,
"SchemaVersion": "string",
"Severity": {
  "Label": "string",
  "Normalized": number,
  "Original": "string",
  "Product": number
},
"SourceUrl": "string",
"ThreatIntelIndicators": [
```json
{
  "Category": "string",
  "LastObservedAt": "string",
  "Source": "string",
  "SourceUrl": "string",
  "Type": "string",
  "Value": "string"
}

"Threats": [
  {
    "FilePaths": [
      {
        "FileName": "string",
        "FilePath": "string",
        "Hash": "string",
        "ResourceId": "string"
      }
    ],
    "ItemCount": "number",
    "Name": "string",
    "Severity": "string"
  }
],
"Title": "string",
"Types": [ "string" ],
"UpdatedAt": "string",
"UserDefinedFields": {
  "string": "string"
},
"VerificationState": "string",
"Vulnerabilities": [
  {
    "CVSS": [
      {
        "Adjustments": [
          {
            "Metric": "string",
            "Reason": "string"
          }
        ],
        "BaseScore": "number",
        "BaseVector": "string",
        "Source": "string",
        "Version": "string"
      }
    ],
    "FixAvailable": "string",
    "Id": "string",
    "ReferenceUrls": [ "string" ],
    "RelatedVulnerabilities": [ "string" ],
    "Vendor": {
      "Name": "string",
      "Url": "string",
      "VendorCreatedAt": "string",
      "VendorSeverity": "string",
      "VendorUpdatedAt": "string"
    },
    "VulnerablePackages": [
      {
        "Architecture": "string",
        "Epoch": "string",
        "FilePath": "string",
        "FixedInVersion": "string",
        "Name": "string",
        "PackageManager": "string"
      }
    ]
  }
}
```
"Release": "string",
"Remediation": "string",
"SourceLayerArn": "string",
"SourceLayerHash": "string",
"Version": "string"

"Workflow": {
  "Status": "string"
},
"WorkflowState": "string"

"NextToken": "string"

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Findings (p. 207)

The findings that matched the filters specified in the request.

Type: Array of AwsSecurityFinding (p. 404) objects

NextToken (p. 207)

The pagination token to use to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.
HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetInsightResults

Lists the results of the Security Hub insight specified by the insight ARN.

Request Syntax

```
GET /insights/results/InsightArn+ HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**InsightArn (p. 270)**

The ARN of the insight for which to return results.

Pattern: .*\S.*

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "InsightResults": {
      "GroupByAttribute": "string",
      "InsightArn": "string",
      "ResultValues": [
         {
            "Count": number,
            "GroupByAttributeValue": "string"
         }
      ]
   }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**InsightResults (p. 270)**

The insight results returned by the operation.

Type: `InsightResults (p. 459)` object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
GetInsights

Lists and describes insights for the specified insight ARNs.

Request Syntax

```
POST /insights/get HTTP/1.1
Content-type: application/json

{
   "InsightArns": [ "string" ],
   "MaxResults": number,
   "NextToken": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

- **InsightArns (p. 272)**
  
  The ARNs of the insights to describe. If you do not provide any insight ARNs, then GetInsights returns all of your custom insights. It does not return any managed insights.
  
  Type: Array of strings
  
  Pattern: .*\S.*
  
  Required: No

- **MaxResults (p. 272)**
  
  The maximum number of items to return in the response.
  
  Type: Integer
  
  Valid Range: Minimum value of 1. Maximum value of 100.
  
  Required: No

- **NextToken (p. 272)**
  
  The token that is required for pagination. On your first call to the GetInsights operation, set the value of this parameter to NULL.
  
  For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.
  
  Type: String
  
  Required: No

Response Syntax

```
HTTP/1.1 200
```

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272
Content-type: application/json

{
  "Insights": [
    {
      "Filters": {
        "AwsAccountId": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ],
        "CompanyName": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ],
        "ComplianceAssociatedStandardsId": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ],
        "ComplianceSecurityControlId": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ],
        "ComplianceStatus": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ],
        "Confidence": [
          {
            "Eq": number,
            "Gte": number,
            "Lte": number
          }
        ],
        "CreatedAt": [
          {
            "DateRange": {
              "Unit": "string",
              "Value": number
            },
            "End": "string",
            "Start": "string"
          }
        ],
        "Criticality": [
          {
            "Eq": number,
            "Gte": number,
            "Lte": number
          }
        ],
        "Description": [
          {
            "Comparison": "string",
            "Value": "string"
          }
        ]
      }
    }
  ]
}

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273
"FindingProviderFieldsConfidence": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"FindingProviderFieldsCriticality": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"FindingProviderFieldsRelatedFindingsId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsRelatedFindingsProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsSeverityLabel": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsSeverityOriginal": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsTypes": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FirstObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"GeneratorId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Id": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]
"Keyword": [
  { "Value": "string" }
],
"LastObservedAt": [
  { "DateRange": {
    "Unit": "string",
    "Value": number
  },
  "End": "string",
  "Start": "string"
 }
],
"MalwareName": [
  { "Comparison": "string",
    "Value": "string"
 }
],
"MalwarePath": [
  { "Comparison": "string",
    "Value": "string"
 }
],
"MalwareState": [
  { "Comparison": "string",
    "Value": "string"
 }
],
"MalwareType": [
  { "Comparison": "string",
    "Value": "string"
 }
],
"NetworkDestinationDomain": [
  { "Comparison": "string",
    "Value": "string"
 }
],
"NetworkDestinationIpV4": [
  { "Cidr": "string"
 }
],
"NetworkDestinationIpV6": [
  { "Cidr": "string"
 }
],
"NetworkDestinationPort": [
  { "Eq": number,
    "Gt": number,
    "Lt": number
 }
],
"NetworkDirection": [
  { "Comparison": "string",
    "Value": "string"
 } ]
"NetworkProtocol": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"NetworkSourceDomain": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"NetworkSourceIpV4": [  
  {  
    "Cidr": "string"
  }  
],
"NetworkSourceIpV6": [  
  {  
    "Cidr": "string"
  }  
],
"NetworkSourceMac": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"NetworkSourcePort": [  
  {  
    "Eq": number,
    "Gte": number,
    "Lte": number
  }  
],
"NoteText": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"NoteUpdatedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",
      "Value": number
    },  
    "End": "string",
    "Start": "string"
  }  
],
"NoteUpdatedBy": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ProcessLaunchedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",
      "Value": number
    },  
    "End": "string",
    "Start": "string"
  }  
]}
"Start": "string"
},
"ProcessName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProcessParentPid": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"ProcessPath": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProcessPid": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"ProcessTerminatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProductFields": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ProductName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RecommendationText": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RecordState": [
"Comparison": "string",
"Value": "string"
]
],
"Region": [
{
"Comparison": "string",
"Value": "string"
}
],
"RelatedFindingsId": [
{
"Comparison": "string",
"Value": "string"
}
],
"RelatedFindingsProductArn": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceIamInstanceProfileArn": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceImageId": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceIpV4Addresses": [
{
"Cidr": "string"
}
],
"ResourceAwsEc2InstanceIpV6Addresses": [
{
"Cidr": "string"
}
],
"ResourceAwsEc2InstanceKeyName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceLaunchedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ResourceAwsEc2InstanceSubnetId": [
{
"Comparison": "string",
"Value": "string"
}
]
"ResourceAwsEc2InstanceType": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsEc2InstanceVpcId": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsIamAccessKeyCreatedAt": [  
  {  
    "DateRange": {  
      "Unit": "string",
      "Value": number
    },  
    "End": "string",
    "Start": "string"
  }  
],
"ResourceAwsIamAccessKeyPrincipalName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsIamAccessKeyStatus": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsIamAccessKeyUserName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsIamUserUserName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsS3BucketOwnerId": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceAwsS3BucketOwnerName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceContainerImageId": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
],
"ResourceContainerImageName": [  
  {  
    "Comparison": "string",
    "Value": "string"
  }  
]
"Comparison": "string",
"Value": "string"
],
"ResourceContainerLaunchedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
},
"ResourceContainerName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceDetailsOther": [
{
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ResourceId": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourcePartition": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceRegion": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceTags": [
{
"Comparison": "string",
"Key": "string",
"Value": "string"
}
],
"ResourceType": [
{
"Comparison": "string",
"Value": "string"
}
],
"Sample": [
{
"Value": boolean
}
],
"SeverityLabel": [
{
"Comparison": "string",
"Value": "string"
}
]
"Value": "string"
],
"SeverityNormalized": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"SeverityProduct": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"SourceUrl": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorCategory": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorLastObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ThreatIntelIndicatorSource": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorSourceUrl": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorType": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorValue": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Title": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Insights (p. 272)**

The insights returned by the operation.

Type: Array of **Insight** objects
NextToken (p. 272)

The pagination token to use to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetInvitationsCount

Returns the count of all Security Hub membership invitations that were sent to the current member account, not including the currently accepted invitation.

Request Syntax

GET /invitations/count HTTP/1.1

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "InvitationsCount": number
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

InvitationsCount (p. 284)

The number of all membership invitations sent to this Security Hub member account, not including the currently accepted invitation.

Type: Integer

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.
HTTP Status Code: 401
InvalidInputException
The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400
LimitExceededException
The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetMasterAccount

This method is deprecated. Instead, use GetAdministratorAccount.

The Security Hub console continues to use GetMasterAccount. It will eventually change to use GetAdministratorAccount. Any IAM policies that specifically control access to this function must continue to use GetMasterAccount. You should also add GetAdministratorAccount to your policies to ensure that the correct permissions are in place after the console begins to use GetAdministratorAccount.

Provides the details for the Security Hub administrator account for the current member account.

Can be used by both member accounts that are managed using Organizations and accounts that were invited manually.

Request Syntax

```
GET /master HTTP/1.1
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
   "Master": {
      "AccountId": "string",
      "InvitationId": "string",
      "InvitedAt": "string",
      "MemberStatus": "string"
   }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Master (p. 286)**

A list of details about the Security Hub administrator account for the current member account.

Type: Invitation (p. 461) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetMembers

Returns the details for the Security Hub member accounts for the specified account IDs.

An administrator account can be either the delegated Security Hub administrator account for an
organization or an administrator account that enabled Security Hub manually.

The results include both member accounts that are managed using Organizations and accounts that were
invited manually.

Request Syntax

POST /members/get HTTP/1.1
Content-type: application/json

{   "AccountIds": [ "string" ]
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AccountIds (p. 288)

The list of account IDs for the Security Hub member accounts to return the details for.

Type: Array of strings

Pattern: .\*\S.*

Required: Yes

Response Syntax

HTTP/1.1 200
Content-type: application/json

{   "Members": [
       {   "AccountId": "string",
           "AdministratorId": "string",
           "Email": "string",
           "InvitedAt": "string",
           "MasterId": "string",
           "MemberStatus": "string",
           "UpdatedAt": "string"
       }
   ],
   "UnprocessedAccounts": [}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Members (p. 288)**

The list of details about the Security Hub member accounts.

Type: Array of Member (p. 468) objects

**UnprocessedAccounts (p. 288)**

The list of AWS accounts that could not be processed. For each account, the list includes the account ID and the email address.

Type: Array of Result (p. 509) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
InviteMembers

Invites other AWS accounts to become member accounts for the Security Hub administrator account that the invitation is sent from.

This operation is only used to invite accounts that do not belong to an organization. Organization accounts do not receive invitations.

Before you can use this action to invite a member, you must first use the `CreateMembers` action to create the member account in Security Hub.

When the account owner enables Security Hub and accepts the invitation to become a member account, the administrator account can view the findings generated from the member account.

Request Syntax

```
POST /members/invite HTTP/1.1
Content-type: application/json

{
  "AccountIds": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

`AccountIds` (p. 291)

The list of account IDs of the AWS accounts to invite to Security Hub as members.

Type: Array of strings

Pattern: .*\S.*

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "UnprocessedAccounts": [
    {
      "AccountId": "string",
      "ProcessingResult": "string"
    }
  ]
}
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**UnprocessedAccounts (p. 291)**

The list of AWS accounts that could not be processed. For each account, the list includes the account ID and the email address.

Type: Array of [Result (p. 509)] objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)].

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2

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See Also

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListAutomationRules

A list of automation rules and their metadata for the calling account.

Request Syntax

GET /automationrules/list?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 294)

The maximum number of rules to return in the response. This currently ranges from 1 to 100.

Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 294)

A token to specify where to start paginating the response. This is the NextToken from a previously truncated response. On your first call to the ListAutomationRules API, set the value of this parameter to NULL.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{  
  "AutomationRulesMetadata": [
    
    "CreatedAt": "string",
    "CreatedBy": "string",
    "Description": "string",
    "IsTerminal": boolean,
    "RuleArn": "string",
    "RuleName": "string",
    "RuleOrder": number,
    "RuleStatus": "string",
    "UpdatedAt": "string"
  
  },
  "NextToken": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.
AutomationRulesMetadata (p. 294)

Metadata for rules in the calling account. The response includes rules with a RuleStatus of ENABLED and DISABLED.

Type: Array of AutomationRulesMetadata (p. 399) objects

NextToken (p. 294)

A pagination token for the response.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
ListEnabledProductsForImport

Lists all findings-generating solutions (products) that you are subscribed to receive findings from in Security Hub.

Request Syntax

GET /productSubscriptions?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 297)

The maximum number of items to return in the response.

Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 297)

The token that is required for pagination. On your first call to the ListEnabledProductsForImport operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
  "NextToken": "string",
  "ProductSubscriptions": [ "string" ]
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken (p. 297)

The pagination token to use to request the next page of results.

Type: String
ProductSubscriptions (p. 297)

The list of ARNs for the resources that represent your subscriptions to products.

Type: Array of strings

Pattern: .\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for C
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListFindingAggregators

If finding aggregation is enabled, then ListFindingAggregators returns the ARN of the finding aggregator. You can run this operation from any Region.

Request Syntax

```
GET /findingAggregator/list?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 299)

The maximum number of results to return. This operation currently only returns a single result.

Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 299)

The token returned with the previous set of results. Identifies the next set of results to return.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json
{
    "FindingAggregators": [ 
        {
            "FindingAggregatorArn": "string" 
        },
        "NextToken": "string"
    ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FindingAggregators (p. 299)

The list of finding aggregators. This operation currently only returns a single result.

Type: Array of FindingAggregator (p. 447) objects

NextToken (p. 299)

If there are more results, this is the token to provide in the next call to ListFindingAggregators.
This operation currently only returns a single result.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

AccessDeniedException

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListInvitations

Lists all Security Hub membership invitations that were sent to the current AWS account.

This operation is only used by accounts that are managed by invitation. Accounts that are managed using the integration with Organizations do not receive invitations.

Request Syntax

GET /invitations?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 301)

The maximum number of items to return in the response.


NextToken (p. 301)

The token that is required for pagination. On your first call to the ListInvitations operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
   "Invitations": [
      {
         "AccountId": "string",
         "InvitationId": "string",
         "InvitedAt": "string",
         "MemberStatus": "string"
      }
   ],
   "NextToken": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.
The following data is returned in JSON format by the service.

**Invitations (p. 301)**

The details of the invitations returned by the operation.

Type: Array of **Invitation (p. 461)** objects

**NextToken (p. 301)**

The pagination token to use to request the next page of results.

Type: String

Pattern: .*\S.*

**Errors**

For information about the errors that are common to all actions, see **Common Errors (p. 1294)**.

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V3
ListMembers

Lists details about all member accounts for the current Security Hub administrator account.
The results include both member accounts that belong to an organization and member accounts that were invited manually.

Request Syntax

```
GET /members?MaxResults=MaxResults&NextToken=NextToken&OnlyAssociated=OnlyAssociated
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**MaxResults (p. 304)**

The maximum number of items to return in the response.


**NextToken (p. 304)**

The token that is required for pagination. On your first call to the ListMembers operation, set the value of this parameter to NULL.

For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

**OnlyAssociated (p. 304)**

Specifies which member accounts to include in the response based on their relationship status with the administrator account. The default value is TRUE.

If OnlyAssociated is set to TRUE, the response includes member accounts whose relationship status with the administrator account is set to ENABLED.

If OnlyAssociated is set to FALSE, the response includes all existing member accounts.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{ "Members": [ { "AccountId": "string", "AdministratorId": "string", "Email": "string", "InvitedAt": "string", "MasterId": "string", } ]
```

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{
   "MemberStatus": "string",
   "UpdatedAt": "string"
},
"NextToken": "string"
}

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Members (p. 304)**

Member details returned by the operation.

Type: Array of Member (p. 468) objects

**NextToken (p. 304)**

The pagination token to use to request the next page of results.

Type: String

Pattern: .*\S.*

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
See Also

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListOrganizationAdminAccounts

Lists the Security Hub administrator accounts. Can only be called by the organization management account.

Request Syntax

GET /organization/admin?MaxResults=MaxResults&NextToken=NextToken HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 307)

   The maximum number of items to return in the response.

NextToken (p. 307)

   The token that is required for pagination. On your first call to the ListOrganizationAdminAccounts operation, set the value of this parameter to NULL. For subsequent calls to the operation, to continue listing data, set the value of this parameter to the value returned from the previous response.

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{   "AdminAccounts": [       {           "AccountId": "string",           "Status": "string"       }   ], "NextToken": "string" }

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AdminAccounts (p. 307)

   The list of Security Hub administrator accounts.
Type: Array of AdminAccount (p. 385) objects

NextToken (p. 307)

The pagination token to use to request the next page of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListSecurityControlDefinitions

Lists all of the security controls that apply to a specified standard.

Request Syntax

GET /securityControls/definitions?
MaxResults=MaxResults&NextToken=NextToken&StandardsArn=StandardsArn HTTP/1.1

URI Request Parameters

The request uses the following URI parameters.

MaxResults (p. 309)

An optional parameter that limits the total results of the API response to the specified number. If this parameter isn't provided in the request, the results include the first 25 security controls that apply to the specified standard. The results also include a NextToken parameter that you can use in a subsequent API call to get the next 25 controls. This repeats until all controls for the standard are returned.

Valid Range: Minimum value of 1. Maximum value of 100.

NextToken (p. 309)

Optional pagination parameter.

StandardsArn (p. 309)

The Amazon Resource Name (ARN) of the standard that you want to view controls for.

Pattern: .*\S.*

Request Body

The request does not have a request body.

Response Syntax

HTTP/1.1 200
Content-type: application/json

{
    "NextToken": "string",
    "SecurityControlDefinitions": [
        {
            "CurrentRegionAvailability": "string",
            "Description": "string",
            "RemediationUrl": "string",
            "SecurityControlId": "string",
            "SeverityRating": "string",
            "Title": "string"
        }
    ]
}
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**NextToken (p. 309)**

A pagination parameter that's included in the response only if it was included in the request.

Type: String

**SecurityControlDefinitions (p. 309)**

An array of controls that apply to the specified standard.

Type: Array of SecurityControlDefinition (p. 512) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListStandardsControlAssociations

Specifies whether a control is currently enabled or disabled in each enabled standard in the calling account.

Request Syntax

```
GET /associations?MaxResults=MaxResults&NextToken=NextToken&SecurityControlId=SecurityControlId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**MaxResults (p. 312)**

An optional parameter that limits the total results of the API response to the specified number. If this parameter isn't provided in the request, the results include the first 25 standard and control associations. The results also include a NextToken parameter that you can use in a subsequent API call to get the next 25 associations. This repeats until all associations for the specified control are returned. The number of results is limited by the number of supported Security Hub standards that you've enabled in the calling account.

Valid Range: Minimum value of 1. Maximum value of 100.

**NextToken (p. 312)**

Optional pagination parameter.

**SecurityControlId (p. 312)**

The identifier of the control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) that you want to determine the enablement status of in each enabled standard.

Pattern: ".*\S.*"

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "NextToken": "string",
    "StandardsControlAssociationSummaries": [
        {
            "AssociationStatus": "string",
            "RelatedRequirements": [ "string" ],
            "SecurityControlArn": "string",
            "SecurityControlId": "string",
            "StandardsArn": "string"
        }
    ]
}
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken (p. 312)

A pagination parameter that's included in the response only if it was included in the request.

Type: String

StandardsControlAssociationSummaries (p. 312)

An array that provides the enablement status and other details for each security control that applies
to each enabled standard.

Type: Array of StandardsControlAssociationSummary (p. 530) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account
or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
See Also

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListTagsForResource

Returns a list of tags associated with a resource.

Request Syntax

```
GET /tags/{ResourceArn} HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

**ResourceArn (p. 315)**

The ARN of the resource to retrieve tags for.

- Pattern: `^arn:aws:securityhub:.*`
- Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "Tags": {
    "String": "string"
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**Tags (p. 315)**

The tags associated with a resource.

- Type: String to string map
- Map Entries: Maximum number of 50 items.
- Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`
- Value Length Constraints: Maximum length of 256.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
TagResource

Adds one or more tags to a resource.

Request Syntax

POST /tags/{ResourceArn} HTTP/1.1
Content-type: application/json

{
  "Tags": {
    "string" : "string"
  }
}

URI Request Parameters

The request uses the following URI parameters.

ResourceArn (p. 317)

The ARN of the resource to apply the tags to.

Pattern: ^arn:aws:securityhub:.*

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags (p. 317)

The tags to add to the resource. You can add up to 50 tags at a time. The tag keys can be no longer than 128 characters. The tag values can be no longer than 256 characters.

Type: String to string map

Map Entries: Maximum number of 50 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: ^(?!aws:)[a-zA-Z+-=._:/]+$ 

Value Length Constraints: Maximum length of 256.

Required: Yes

Response Syntax

HTTP/1.1 200
Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UntagResource

Removes one or more tags from a resource.

**Request Syntax**

```
DELETE /tags/{ResourceArn}?tagKeys={TagKeys} HTTP/1.1
```

**URI Request Parameters**

The request uses the following URI parameters.

- **ResourceArn (p. 319)**
  
  The ARN of the resource to remove the tags from.
  
  Pattern: `^arn:aws:securityhub:`
  
  Required: Yes

- **TagKeys (p. 319)**
  
  The tag keys associated with the tags to remove from the resource. You can remove up to 50 tags at a time.
  
  Array Members: Minimum number of 1 item. Maximum number of 50 items.
  
  
  Pattern: `^(?!aws:)[a-zA-Z+-=._:][/]+$`
  
  Required: Yes

**Request Body**

The request does not have a request body.

**Response Syntax**

```
HTTP/1.1 200
```

**Response Elements**

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 1294).

- **InternalException**
  
  Internal server error.
HTTP Status Code: 500

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateActionTarget

Updates the name and description of a custom action target in Security Hub.

Request Syntax

```
PATCH /actionTargets/ActionTargetArn+ HTTP/1.1
Content-type: application/json
{
    "Description": "string",
    "Name": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

**ActionTargetArn (p. 321)**

The ARN of the custom action target to update.

- Pattern: .*
- Required: Yes

Request Body

The request accepts the following data in JSON format.

**Description (p. 321)**

The updated description for the custom action target.

- Type: String
- Pattern: .*
- Required: No

**Name (p. 321)**

The updated name of the custom action target.

- Type: String
- Pattern: .*
- Required: No

Response Syntax

```
HTTP/1.1 200
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateFindingAggregator

Updates the finding aggregation configuration. Used to update the Region linking mode and the list of included or excluded Regions. You cannot use UpdateFindingAggregator to change the aggregation Region.

You must run UpdateFindingAggregator from the current aggregation Region.

Request Syntax

```
PATCH /findingAggregator/update HTTP/1.1
Content-type: application/json
{
    "FindingAggregatorArn": "string",
    "RegionLinkingMode": "string",
    "Regions": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

FindingAggregatorArn (p. 323)

The ARN of the finding aggregator. To obtain the ARN, use ListFindingAggregators.

Type: String

Pattern: .*\S.*

Required: Yes

RegionLinkingMode (p. 323)

Indicates whether to aggregate findings from all of the available Regions in the current partition. Also determines whether to automatically aggregate findings from new Regions as Security Hub supports them and you opt into them.

The selected option also determines how to use the Regions provided in the Regions list.

The options are as follows:

- **ALL_REGIONS** - Indicates to aggregate findings from all of the Regions where Security Hub is enabled. When you choose this option, Security Hub also automatically aggregates findings from new Regions as Security Hub supports them and you opt into them.
- **ALL_REGIONS_EXCEPT_SPECIFIED** - Indicates to aggregate findings from all of the Regions where Security Hub is enabled, except for the Regions listed in the Regions parameter. When you choose this option, Security Hub also automatically aggregates findings from new Regions as Security Hub supports them and you opt into them.
- **SPECIFIED_REGIONS** - Indicates to aggregate findings only from the Regions listed in the Regions parameter. Security Hub does not automatically aggregate findings from new Regions.
Type: String
Pattern: .*\S.*
Required: Yes

**Regions (p. 323)**

If RegionLinkingMode is ALL_REGIONS_EXCEPT_SPECIFIED, then this is a space-separated list of Regions that do not aggregate findings to the aggregation Region.

If RegionLinkingMode is SPECIFIED_REGIONS, then this is a space-separated list of Regions that do aggregate findings to the aggregation Region.

Type: Array of strings
Pattern: .*\S.*
Required: No

### Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
  "FindingAggregationRegion": "string",
  "FindingAggregatorArn": "string",
  "RegionLinkingMode": "string",
  "Regions": [ "string" ]
}
```

### Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

**FindingAggregationRegion (p. 324)**

The aggregation Region.

Type: String

Pattern: .*\S.*

**FindingAggregatorArn (p. 324)**

The ARN of the finding aggregator.

Type: String

Pattern: .*\S.*

**RegionLinkingMode (p. 324)**

Indicates whether to link all Regions, all Regions except for a list of excluded Regions, or a list of included Regions.

Type: String
Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

**AccessDeniedException**

You don't have permission to perform the action specified in the request.

HTTP Status Code: 403

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.

HTTP Status Code: 401

**InvalidInputException**

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

**LimitExceededException**

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

**ResourceNotFoundException**

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
See Also

- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
UpdateFindings

UpdateFindings is deprecated. Instead of UpdateFindings, use BatchUpdateFindings.

Updates the Note and RecordState of the Security Hub-aggregated findings that the filter attributes specify. Any member account that can view the finding also sees the update to the finding.

Request Syntax

PATCH /findings HTTP/1.1
Content-type: application/json

{
    "Filters": {
        "AwsAccountId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "CompanyName": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceAssociatedStandardsId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceSecurityControlId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceStatus": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "Confidence": [
            {
                "Eq": number,
                "Gte": number,
                "Lte": number
            }
        ],
        "CreatedAt": [
            {
                "DateRange": {
                    "Unit": "string",
                    "Value": number
                },
                "End": "string",
                "Start": "string"
            }
        ],
        "Criticality": [           API Version 2018-10-26
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}
Request Syntax

```json
{
  "Eq": number,
  "Gte": number,
  "Lte": number
}

"Description": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsConfidence": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],

"FindingProviderFieldsCriticality": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],

"FindingProviderFieldsRelatedFindingsId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsRelatedFindingsProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsSeverityLabel": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsSeverityOriginal": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FindingProviderFieldsTypes": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],

"FirstObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
]

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"GeneratorId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Id": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Keyword": [
  {
    "Value": "string"
  }
],
"LastObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": "number"
    },
    "End": "string",
    "Start": "string"
  }
],
"MalwareName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"MalwarePath": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"MalwareState": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"MalwareType": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkDestinationDomain": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"NetworkDestinationIpV4": [
  {
    "Cidr": "string"
  }
],
"NetworkDestinationIpV6": [
  {
    "Cidr": "string"
  }
]


```
],
"NetworkDestinationPort": [
    {
        "Eq": number,
        "Gte": number,
        "Lte": number
    }
],
"NetworkDirection": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"NetworkProtocol": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"NetworkSourceDomain": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"NetworkSourceIpV4": [
    {
        "Cidr": "string"
    }
],
"NetworkSourceIpV6": [
    {
        "Cidr": "string"
    }
],
"NetworkSourceMac": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"NetworkSourcePort": [
    {
        "Eq": number,
        "Gte": number,
        "Lte": number
    }
],
"NoteText": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"NoteUpdatedAt": [
    {
        "DateRange": {
            "Unit": "string",
            "Value": number
        },
        "End": "string",
        "Start": "string"
    }
],
"NoteUpdatedBy": [

```

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{   "Comparison": "string",   "Value": "string" },
"ProcessLaunchedAt": [
{   "DateRange": {     "Unit": "string",     "Value": number   },   "End": "string",   "Start": "string" },
"ProcessName": [
{   "Comparison": "string",   "Value": "string" },
"ProcessParentPid": [
{     "Eq": number,     "Gte": number,     "Lte": number   },
"ProcessPath": [
{     "Comparison": "string",     "Value": "string" },
"ProcessPid": [
{     "Eq": number,     "Gte": number,     "Lte": number   },
"ProcessTerminatedAt": [
{     "DateRange": {       "Unit": "string",       "Value": number     },     "End": "string",     "Start": "string" },
"ProductArn": [
{     "Comparison": "string",     "Value": "string" }
"ProductFields": [
{     "Comparison": "string",     "Key": "string",     "Value": "string" }
"ProductName": [}
"Comparison": "string",
"Value": "string"
],
"RecommendationText": [
{
"Comparison": "string",
"Value": "string"
}
],
"RecordState": [
{
"Comparison": "string",
"Value": "string"
}
],
"Region": [
{
"Comparison": "string",
"Value": "string"
}
],
"RelatedFindingsId": [
{
"Comparison": "string",
"Value": "string"
}
],
"RelatedFindingsProductArn": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceIamInstanceProfileArn": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceImageId": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceIpV4Addresses": [
{
"Cidr": "string"
}
],
"ResourceAwsEc2InstanceIpV6Addresses": [
{
"Cidr": "string"
}
],
"ResourceAwsEc2InstanceKeyName": [
{
"Comparison": "string",
"Value": "string"
}
],
"ResourceAwsEc2InstanceLaunchedAt": [
{
"DateRange": {
"Unit": "string",
"Comparison": "string",
"Value": "string"
}
}
]
"Value": number,
"End": "string",
"Start": "string"
},
"ResourceAwsEc2InstanceSubnetId": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsEc2InstanceType": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsEc2InstanceVpcId": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsIamAccessKeyCreatedAt": [
  
"DateRange": {
  "Unit": "string",
  "Value": number
},
"End": "string",
"Start": "string"
],
"ResourceAwsIamAccessKeyPrincipalName": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsIamAccessKeyStatus": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsIamAccessKeyUserName": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsIamUserUserName": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsS3BucketOwnerId": [
  
"Comparison": "string",
"Value": "string"
],
"ResourceAwsS3BucketOwnerName": [
  
"Comparison": "string",
"Value": "string"
"Comparison": "string",
"Value": "string"
],
"ResourceContainerImageId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceContainerImageName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceContainerLaunchedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ResourceContainerName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceDetailsOther": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ResourceId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourcePartition": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceRegion": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceTags": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ResourceType": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]
"Comparison": "string",
"Value": "string"
],
"Sample": [
{
"Value": boolean
}
],
"SeverityLabel": [
{
"Comparison": "string",
"Value": "string"
}
],
"SeverityNormalized": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SeverityProduct": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"SourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorCategory": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorLastObservedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"ThreatIntelIndicatorSource": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorSourceUrl": [
{
"Comparison": "string",
"Value": "string"
}
],
"ThreatIntelIndicatorType": [
{
"Comparison": "string",
"Value": "string"
}]}
"Value": "string"
],
"ThreatIntelIndicatorValue": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Title": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Type": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"UpdatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"UserDefinedFields": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"VerificationState": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"WorkflowState": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"WorkflowStatus": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Note": {
  "Text": "string",
  "UpdatedBy": "string"
},
"RecordState": "string"}
URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Filters (p. 327)

A collection of attributes that specify which findings you want to update.

Type: AwsSecurityFindingFilters (p. 412) object

Required: Yes

Note (p. 327)

The updated note for the finding.

Type: NoteUpdate (p. 478) object

Required: No

RecordState (p. 327)

The updated record state for the finding.

Type: String

Valid Values: ACTIVE | ARCHIVED

Required: No

Response Syntax

HTTP/1.1 200

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401
InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)
UpdateInsight

Updates the Security Hub insight identified by the specified insight ARN.

Request Syntax

PATCH /insights/{InsightArn} HTTP/1.1
Content-type: application/json

{
    "Filters": {
        "AwsAccountId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "CompanyName": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceAssociatedStandardsId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceSecurityControlId": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "ComplianceStatus": [
            {
                "Comparison": "string",
                "Value": "string"
            }
        ],
        "Confidence": [
            {
                "Eq": number,
                "Gte": number,
                "Lte": number
            }
        ],
        "CreatedAt": [
            {
                "DateRange": {
                    "Unit": "string",
                    "Value": number
                },
                "End": "string",
                "Start": "string"
            }
        ],
        "Criticality": [
            {
                "Eq": number,
                "Gte": number,
                "Lte": number
            }
        ]
    }
}
},
"Description": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsConfidence": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"FindingProviderFieldsCriticality": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"FindingProviderFieldsRelatedFindingsId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsRelatedFindingsProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsSeverityLabel": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsSeverityOriginal": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FindingProviderFieldsTypes": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"FirstObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"GeneratorId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]


},
"Id": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"Keyword": [ 
  { "Value": "string"
  }
],
"LastObservedAt": [ 
  { "DateRange": { 
    "Unit": "string",
    "Value": number
  },
    "Start": "string",
    "End": "string"
  }
],
"MalwareName": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"MalwarePath": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"MalwareState": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"MalwareType": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"NetworkDestinationDomain": [ 
  { "Comparison": "string",
    "Value": "string"
  }
],
"NetworkDestinationIpV4": [ 
  { "Cidr": "string"
  }
],
"NetworkDestinationIpV6": [ 
  { "Cidr": "string"
  }
],
"NetworkDestinationPort": [ 
  "Eq": number,
"Gte": number,
"Lte": number
]
],
"NetworkDirection": [
{
"Comparison": "string",
"Value": "string"
}
],
"NetworkProtocol": [
{
"Comparison": "string",
"Value": "string"
}
],
"NetworkSourceDomain": [
{
"Comparison": "string",
"Value": "string"
}
],
"NetworkSourceIpV4": [
{
"Cidr": "string"
}
],
"NetworkSourceIpV6": [
{
"Cidr": "string"
}
],
"NetworkSourceMac": [
{
"Comparison": "string",
"Value": "string"
}
],
"NetworkSourcePort": [
{
"Eq": number,
"Gte": number,
"Lte": number
}
],
"NoteText": [
{
"Comparison": "string",
"Value": "string"
}
],
"NoteUpdatedAt": [
{
"DateRange": {
"Unit": "string",
"Value": number
},
"End": "string",
"Start": "string"
}
],
"NoteUpdatedBy": [
{
"Comparison": "string",
"Value": "string"
}
"ProcessLaunchedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ProcessName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProcessParentPid": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"ProcessPath": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProcessPid": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"ProcessTerminatedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ProductFields": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ProductName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RecommendationText": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RecordState": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"Region": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RelatedFindingsId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"RelatedFindingsProductArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceAwsEc2InstanceIamInstanceProfileArn": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceAwsEc2InstanceImageId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceAwsEc2InstanceIpV4Addresses": [
  {
    "Cidr": "string"
  }
],
"ResourceAwsEc2InstanceIpV6Addresses": [
  {
    "Cidr": "string"
  }
],
"ResourceAwsEc2InstanceKeyName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceAwsEc2InstanceLaunchedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
],
"ResourceAwsEc2InstanceSubnetId": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsEc2InstanceType": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsEc2InstanceVpcId": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsIamAccessKeyCreatedAt": [
    {
        "DateRange": {
            "Unit": "string",
            "Value": number
        },
        "End": "string",
        "Start": "string"
    }
],
"ResourceAwsIamAccessKeyPrincipalName": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsIamAccessKeyStatus": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsIamAccessKeyUserName": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsIamUserName": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsS3BucketOwnerId": [
    {
        "Comparison": "string",
        "Value": "string"
    }
],
"ResourceAwsS3BucketOwnerName": [
    {
        "Comparison": "string",
        "Value": "string"
    }
]}
"ResourceContainerImageId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceContainerImageName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceContainerLaunchedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ResourceContainerName": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceDetailsOther": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ResourceId": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourcePartition": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceRegion": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ResourceTags": [
  {
    "Comparison": "string",
    "Key": "string",
    "Value": "string"
  }
],
"ResourceType": [
  {
    "Comparison": "string",
    "Value": "string"
  }
]
"Sample": [
  {
    "Value": boolean
  }
],
"SeverityLabel": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"SeverityNormalized": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"SeverityProduct": [
  {
    "Eq": number,
    "Gte": number,
    "Lte": number
  }
],
"SourceUrl": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorCategory": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorLastObservedAt": [
  {
    "DateRange": {
      "Unit": "string",
      "Value": number
    },
    "End": "string",
    "Start": "string"
  }
],
"ThreatIntelIndicatorSource": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorSourceUrl": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorType": [
  {
    "Comparison": "string",
    "Value": "string"
  }
],
"ThreatIntelIndicatorValue": [
URI Request Parameters

The request uses the following URI parameters.

**InsightArn (p. 339)**

The ARN of the insight that you want to update.
Request Body

The request accepts the following data in JSON format.

**Filters (p. 339)**

The updated filters that define this insight.

Type: `AwsSecurityFindingFilters (p. 412)` object

Required: No

**GroupByAttribute (p. 339)**

The updated `GroupBy` attribute that defines this insight.

Type: String

Pattern: `.*\S.*`

Required: No

**Name (p. 339)**

The updated name for the insight.

Type: String

Pattern: `.*\S.*`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 1294)](#).

**InternalException**

Internal server error.

HTTP Status Code: 500

**InvalidAccessException**

The account doesn't have permission to perform this action.
HTTP Status Code: 401
InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400
LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429
ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateOrganizationConfiguration

Used to update the configuration related to Organizations. Can only be called from a Security Hub administrator account.

Request Syntax

POST /organization/configuration HTTP/1.1
Content-type: application/json

{  
"AutoEnable": boolean,
  "AutoEnableStandards": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

AutoEnable (p. 351)

Whether to automatically enable Security Hub for new accounts in the organization.

By default, this is false, and new accounts are not added automatically.

To automatically enable Security Hub for new accounts, set this to true.

Type: Boolean

Required: Yes

AutoEnableStandards (p. 351)

Whether to automatically enable Security Hub default standards for new member accounts in the organization.

By default, this parameter is equal to DEFAULT, and new member accounts are automatically enabled with default Security Hub standards.

To opt out of enabling default standards for new member accounts, set this parameter equal to NONE.

Type: String

Valid Values: NONE | DEFAULT

Required: No

Response Syntax

HTTP/1.1 200
Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateSecurityHubConfiguration

Updates configuration options for Security Hub.

Request Syntax

PATCH /accounts HTTP/1.1
Content-type: application/json

{
  "AutoEnableControls": boolean,
  "ControlFindingGenerator": "string"
}

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

**AutoEnableControls (p. 353)**

Whether to automatically enable new controls when they are added to standards that are enabled.

By default, this is set to true, and new controls are enabled automatically. To not automatically enable new controls, set this to false.

Type: Boolean

Required: No

**ControlFindingGenerator (p. 353)**

Updates whether the calling account has consolidated control findings turned on. If the value for this field is set to SECURITY_CONTROL, Security Hub generates a single finding for a control check even when the check applies to multiple enabled standards.

If the value for this field is set to STANDARD_CONTROL, Security Hub generates separate findings for a control check when the check applies to multiple enabled standards.

For accounts that are part of an organization, this value can only be updated in the administrator account.

Type: String

Valid Values: STANDARD_CONTROL | SECURITY_CONTROL

Required: No

Response Syntax

HTTP/1.1 200
Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

LimitExceededException

The request was rejected because it attempted to create resources beyond the current AWS account or throttling limits. The error code describes the limit exceeded.

HTTP Status Code: 429

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateStandardsControl

Used to control whether an individual security standard control is enabled or disabled.

**Request Syntax**

```
PATCH /standards/control/StandardsControlArn+ HTTP/1.1
Content-type: application/json
{
  "ControlStatus": "string",
  "DisabledReason": "string"
}
```

**URI Request Parameters**

The request uses the following URI parameters.

- **StandardsControlArn** *(p. 355)*
  
The ARN of the security standard control to enable or disable.
  
  - Pattern: .*
  
  - Required: Yes

**Request Body**

The request accepts the following data in JSON format.

- **ControlStatus** *(p. 355)*
  
The updated status of the security standard control.
  
  - Type: String
  
  - Valid Values: ENABLED | DISABLED
  
  - Required: No

- **DisabledReason** *(p. 355)*
  
  A description of the reason why you are disabling a security standard control. If you are disabling a control, then this is required.
  
  - Type: String
  
  - Pattern: .*
  
  - Required: No

**Response Syntax**

```
HTTP/1.1 200
```
Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 1294).

InternalException

Internal server error.

HTTP Status Code: 500

InvalidAccessException

The account doesn't have permission to perform this action.

HTTP Status Code: 401

InvalidInputException

The request was rejected because you supplied an invalid or out-of-range value for an input parameter.

HTTP Status Code: 400

ResourceNotFoundException

The request was rejected because we can't find the specified resource.

HTTP Status Code: 404

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
Data Types

The AWS Security Hub API contains several data types that the various actions use. This section describes each data type in detail.

Note
The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

Security Hub supports the following primary data types:

- AccountDetails (p. 376)
- Action (p. 377)
- ActionLocalIpDetails (p. 379)
- ActionLocalPortDetails (p. 380)
- ActionRemotelpDetails (p. 381)
- ActionRemotePortDetails (p. 382)
- ActionTarget (p. 383)
- Adjustment (p. 384)
- AdminAccount (p. 385)
- AssociatedStandard (p. 386)
- AutomationRulesAction (p. 387)
- AutomationRulesConfig (p. 388)
- AutomationRulesFindingFieldsUpdate (p. 391)
- AutomationRulesFindingFilters (p. 393)
- AutomationRulesMetadata (p. 399)
- AwsApiCallAction (p. 401)
- AwsApiCallActionDomainDetails (p. 403)
- BatchUpdateFindingsUnprocessedFinding (p. 427)
- BooleanFilter (p. 429)
- Cell (p. 430)
- City (p. 431)
- ClassificationResult (p. 432)
- ClassificationStatus (p. 434)
- Compliance (p. 435)
- Country (p. 437)
- CustomDataIdentifiersDetections (p. 438)
- CustomDataIdentifiersResult (p. 439)
- Cvss (p. 440)
- DataClassificationDetails (p. 442)
- DateFilter (p. 443)
- DateRange (p. 444)
- DnsRequestAction (p. 445)
- FilePaths (p. 446)
- FindingAggregator (p. 447)
- FindingHistoryRecord (p. 448)
• FindingHistoryUpdate (p. 450)
• FindingHistoryUpdateSource (p. 451)
• FindingProviderFields (p. 452)
• FindingProviderSeverity (p. 454)
• GeoLocation (p. 455)
• IcmpTypeCode (p. 456)
• ImportFindingsError (p. 457)
• Insight (p. 458)
• InsightResults (p. 459)
• InsightResultValue (p. 460)
• Invitation (p. 461)
• IpFilter (p. 462)
• IpOrganizationDetails (p. 463)
• KeywordFilter (p. 464)
• Malware (p. 465)
• MapFilter (p. 466)
• Member (p. 468)
• Network (p. 470)
• NetworkConnectionAction (p. 473)
• NetworkPathComponent (p. 475)
• NetworkPathComponentDetails (p. 476)
• Note (p. 477)
• NoteUpdate (p. 478)
• NumberFilter (p. 479)
• Occurrences (p. 480)
• Page (p. 481)
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AccountDetails

The details of an AWS account.

Contents

AccountId

The ID of an AWS account.

Type: String

Required: Yes

Email

The email of an AWS account.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Action

Provides details about one of the following actions that affects or that was taken on a resource:

- A remote IP address issued an AWS API call
- A DNS request was received
- A remote IP address attempted to connect to an EC2 instance
- A remote IP address attempted a port probe on an EC2 instance

Contents

ActionType

The type of action that was detected. The possible action types are:

- NETWORK_CONNECTION
- AWS_API_CALL
- DNS_REQUEST
- PORT_PROBE

Type: String

Pattern: \S.*

Required: No

AwsApiCallAction

Included if ActionType is AWS_API_CALL. Provides details about the API call that was detected.

Type: AwsApiCallAction (p. 401) object

Required: No

DnsRequestAction

Included if ActionType is DNS_REQUEST. Provides details about the DNS request that was detected.

Type: DnsRequestAction (p. 445) object

Required: No

NetworkConnectionAction

Included if ActionType is NETWORK_CONNECTION. Provides details about the network connection that was detected.

Type: NetworkConnectionAction (p. 473) object

Required: No

PortProbeAction

Included if ActionType is PORT_PROBE. Provides details about the port probe that was detected.

Type: PortProbeAction (p. 484) object

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ActionLocalIpDetails

Provides information about the IP address where the scanned port is located.

Contents

IpAddressV4

The IP address.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ActionLocalPortDetails

For NetworkConnectionAction and PortProbeDetails, LocalPortDetails provides information about the local port that was involved in the action.

Contents

Port

The number of the port.

Type: Integer

Required: No

PortName

The port name of the local connection.

Type: String

Pattern: \S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ActionRemoteIpDetails

For AwsApiAction, NetworkConnectionAction, and PortProbeAction, RemoteIpDetails provides information about the remote IP address that was involved in the action.

Contents

City

The city where the remote IP address is located.

Type: City (p. 431) object

Required: No

Country

The country where the remote IP address is located.

Type: Country (p. 437) object

Required: No

GeoLocation

The coordinates of the location of the remote IP address.

Type: GeoLocation (p. 455) object

Required: No

IpAddressV4

The IP address.

Type: String

Pattern: .*\S.*

Required: No

Organization

The internet service provider (ISP) organization associated with the remote IP address.

Type: IpOrganizationDetails (p. 463) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ActionRemotePortDetails

Provides information about the remote port that was involved in an attempted network connection.

Contents

Port

The number of the port.

Type: Integer

Required: No

PortName

The port name of the remote connection.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ActionTarget

An ActionTarget object.

Contents

ActionTargetArn

The ARN for the target action.

Type: String

Pattern: .*\S.*

Required: Yes

Description

The description of the target action.

Type: String

Pattern: .*\S.*

Required: Yes

Name

The name of the action target.

Type: String

Pattern: .*\S.*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Adjustment

An adjustment to the CVSS metric.

Contents

Metric

The metric to adjust.

Type: String

Pattern: .*\S.*

Required: No

Reason

The reason for the adjustment.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AdminAccount

Represents a Security Hub administrator account designated by an organization management account.

Contents

AccountId

The AWS account identifier of the Security Hub administrator account.

Type: String

Pattern: .*\S.*

Required: No

Status

The current status of the Security Hub administrator account. Indicates whether the account is currently enabled as a Security Hub administrator.

Type: String

Valid Values: ENABLED | DISABLE_IN_PROGRESS

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/cþþ)
- [AWS SDK for Go](https://aws.amazon.com/go)
- [AWS SDK for Java V2](https://aws.amazon.com/java)
- [AWS SDK for Ruby V3](https://aws.amazon.com/ruby)
AssociatedStandard

Information about an enabled security standard in which a security control is enabled.

Contents

StandardsId

The unique identifier of a standard in which a control is enabled. This field consists of the resource portion of the Amazon Resource Name (ARN) returned for a standard in the DescribeStandards API response.

Type: String

Pattern: .\S\.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AutomationRulesAction

One or more actions to update finding fields if a finding matches the defined criteria of the rule.

Contents

FindingFieldsUpdate

Specifies that the automation rule action is an update to a finding field.

Type: AutomationRulesFindingFieldsUpdate (p. 391) object

Required: No

Type

Specifies that the rule action should update the Types finding field. The Types finding field classifies findings in the format of namespace/category/classifier. For more information, see Types taxonomy for ASFF in the AWS Security Hub User Guide.

Type: String

Valid Values: FINDING_FIELDS_UPDATE

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AutomationRulesConfig

Defines the configuration of an automation rule.

Contents

Actions

One or more actions to update finding fields if a finding matches the defined criteria of the rule.

Type: Array of AutomationRulesAction (p. 387) objects

Array Members: Fixed number of 1 item.

Required: No

CreatedAt

A timestamp that indicates when the rule was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces. For example, 2020-03-22T13:22:13.933Z.

Type: Timestamp

Required: No

CreatedBy

The principal that created a rule.

Type: String

Pattern: .*\S.*

Required: No

Criteria

A set of AWS Security Finding Format finding field attributes and corresponding expected values that Security Hub uses to filter findings. If a rule is enabled and a finding matches the conditions specified in this parameter, Security Hub applies the rule action to the finding.

Type: AutomationRulesFindingFilters (p. 393) object

Required: No

Description

A description of the rule.

Type: String

Pattern: .*\S.*

Required: No

IsTerminal

Specifies whether a rule is the last to be applied with respect to a finding that matches the rule criteria. This is useful when a finding matches the criteria for multiple rules, and each rule has different actions. If a rule is terminal, Security Hub applies the rule action to a finding that matches the rule criteria and doesn't evaluate other rules for the finding. By default, a rule isn't terminal.
Type: Boolean
Required: No

 RuleArn
The Amazon Resource Name (ARN) of a rule.
Type: String
Pattern: .*\S.*
Required: No

 RuleName
The name of the rule.
Type: String
Pattern: .*\S.*
Required: No

 RuleOrder
An integer ranging from 1 to 1000 that represents the order in which the rule action is applied to findings. Security Hub applies rules with lower values for this parameter first.
Type: Integer
Valid Range: Minimum value of 1. Maximum value of 1000.
Required: No

 RuleStatus
Whether the rule is active after it is created. If this parameter is equal to ENABLED, Security Hub starts applying the rule to findings and finding updates after the rule is created.
Type: String
Valid Values: ENABLED | DISABLED
Required: No

 UpdatedAt
A timestamp that indicates when the rule was most recently updated.
Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces. For example, 2020-03-22T13:22:13.933Z.
Type: Timestamp
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AutomationRulesFindingFieldsUpdate

Identifies the finding fields that the automation rule action updates when a finding matches the defined criteria.

Contents

Confidence

The rule action updates the Confidence field of a finding.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

Criticality

The rule action updates the Criticality field of a finding.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

Note

The updated note.

Type: NoteUpdate (p. 478) object

Required: No

RelatedFindings

The rule action updates the RelatedFindings field of a finding.

Type: Array of RelatedFinding (p. 493) objects

Required: No

Severity

Updates to the severity information for a finding.

Type: SeverityUpdate (p. 518) object

Required: No

Types

The rule action updates the Types field of a finding.

Type: Array of strings

Pattern: .*\S.*

Required: No

UserDefinedFields

The rule action updates the UserDefinedFields field of a finding.
Type: String to string map

Key Pattern: \.*\S.*
Value Pattern: \.*\S.*

Required: No

**VerificationState**

The rule action updates the `VerificationState` field of a finding.

Type: String

Valid Values: UNKNOWN | TRUE_POSITIVE | FALSE_POSITIVE | BENIGN_POSITIVE

Required: No

**Workflow**

Used to update information about the investigation into the finding.

Type: `WorkflowUpdate` (p. 555) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AutomationRulesFindingFilters

The criteria that determine which findings a rule applies to.

Contents

AwsAccountId

The AWS account ID in which a finding was generated.

Type: Array of StringFilter (p. 539) objects

Required: No

CompanyName

The name of the company for the product that generated the finding. For control-based findings, the company is AWS.

Type: Array of StringFilter (p. 539) objects

Required: No

ComplianceAssociatedStandardsId

The unique identifier of a standard in which a control is enabled. This field consists of the resource portion of the Amazon Resource Name (ARN) returned for a standard in the DescribeStandards API response.

Type: Array of StringFilter (p. 539) objects

Required: No

ComplianceSecurityControlId

The security control ID for which a finding was generated. Security control IDs are the same across standards.

Type: Array of StringFilter (p. 539) objects

Required: No

ComplianceStatus

The result of a security check. This field is only used for findings generated from controls.

Type: Array of StringFilter (p. 539) objects

Required: No

Confidence

The likelihood that a finding accurately identifies the behavior or issue that it was intended to identify. Confidence is scored on a 0–100 basis using a ratio scale. A value of 0 means 0 percent confidence, and a value of 100 means 100 percent confidence. For example, a data exfiltration detection based on a statistical deviation of network traffic has low confidence because an actual exfiltration hasn’t been verified. For more information, see Confidence in the AWS Security Hub User Guide.

Type: Array of NumberFilter (p. 479) objects

Required: No
CreatedAt

A timestamp that indicates when this finding record was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces. For example, `2020-03-22T13:22:13.933Z`.

Type: Array of [DateFilter](p. 443) objects

Required: No

Criticality

The level of importance that is assigned to the resources that are associated with a finding. Criticality is scored on a 0–100 basis, using a ratio scale that supports only full integers. A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources. For more information, see [Criticality](p. 385) in the [AWS Security Hub User Guide](https://docs.aws.amazon.com/securityhub/latest/userguide/security-hub-findings.html).

Type: Array of [NumberFilter](p. 479) objects

Required: No

Description

A finding's description.

Type: Array of [StringFilter](p. 539) objects

Required: No

FirstObservedAt

A timestamp that indicates when the potential security issue captured by a finding was first observed by the security findings product.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces. For example, `2020-03-22T13:22:13.933Z`.

Type: Array of [DateFilter](p. 443) objects

Required: No

GeneratorId

The identifier for the solution-specific component that generated a finding.

Type: Array of [StringFilter](p. 539) objects

Required: No

Id

The product-specific identifier for a finding.

Type: Array of [StringFilter](p. 539) objects

Required: No

LastObservedAt

A timestamp that indicates when the potential security issue captured by a finding was most recently observed by the security findings product.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces. For example, `2020-03-22T13:22:13.933Z`. 
Type: Array of DateFilter (p. 443) objects

Required: No

NoteText

The text of a user-defined note that's added to a finding.

Type: Array of StringFilter (p. 539) objects

Required: No

NoteUpdatedAt

The timestamp of when the note was updated. Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces. For example, 2020-03-22T13:22:13.933Z.

Type: Array of DateFilter (p. 443) objects

Required: No

NoteUpdatedBy

The principal that created a note.

Type: Array of StringFilter (p. 539) objects

Required: No

ProductArn

The Amazon Resource Name (ARN) for a third-party product that generated a finding in Security Hub.

Type: Array of StringFilter (p. 539) objects

Required: No

ProductName

Provides the name of the product that generated the finding. For control-based findings, the product name is Security Hub.

Type: Array of StringFilter (p. 539) objects

Required: No

RecordState

Provides the current state of a finding.

Type: Array of StringFilter (p. 539) objects

Required: No

RelatedFindingsId

The product-generated identifier for a related finding.

Type: Array of StringFilter (p. 539) objects

Required: No

RelatedFindingsProductArn

The ARN for the product that generated a related finding.
Type: Array of `StringFilter (p. 539)` objects

Required: No

**ResourceDetailsOther**

Custom fields and values about the resource that a finding pertains to.

Type: Array of `MapFilter (p. 466)` objects

Required: No

**ResourceId**

The identifier for the given resource type. For AWS resources that are identified by Amazon Resource Names (ARNs), this is the ARN. For AWS resources that lack ARNs, this is the identifier as defined by the AWS service that created the resource. For non-AWS resources, this is a unique identifier that is associated with the resource.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**ResourcePartition**

The partition in which the resource that the finding pertains to is located. A partition is a group of AWS Regions. Each AWS account is scoped to one partition.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**ResourceRegion**

The AWS Region where the resource that a finding pertains to is located.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**ResourceTags**

A list of AWS tags associated with a resource at the time the finding was processed.

Type: Array of `MapFilter (p. 466)` objects

Required: No

**ResourceType**

The type of resource that the finding pertains to.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**SeverityLabel**

The severity value of the finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**SourceUrl**

Provides a URL that links to a page about the current finding in the finding product.
Type: Array of `StringFilter (p. 539)` objects

Required: No

**Title**

A finding's title.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**Type**

One or more finding types in the format of namespace/category/classifier that classify a finding. For a list of namespaces, classifiers, and categories, see *Types taxonomy for ASFF* in the *AWS Security Hub User Guide*.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**UpdatedAt**

A timestamp that indicates when the finding record was most recently updated.

Uses the date-time format specified in *RFC 3339 section 5.6, Internet Date/Time Format*. The value cannot contain spaces. For example, `2020-03-22T13:22:13.933Z`.

Type: Array of `DateFilter (p. 443)` objects

Required: No

**UserDefinedFields**

A list of user-defined name and value string pairs added to a finding.

Type: Array of `MapFilter (p. 466)` objects

Required: No

**VerificationState**

Provides the veracity of a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**WorkflowStatus**

Provides information about the status of the investigation into a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
• AWS SDK for Ruby V3
AutomationRulesMetadata

Metadata for automation rules in the calling account. The response includes rules with a RuleStatus of ENABLED and DISABLED.

Contents

CreatedAt

A timestamp that indicates when the rule was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces. For example, 2020-03-22T13:22:13.933Z.

Type: Timestamp
Required: No

CreatedBy

The principal that created a rule.

Type: String
Pattern: .*\S.*
Required: No

Description

A description of the rule.

Type: String
Pattern: .*\S.*
Required: No

IsTerminal

Specifies whether a rule is the last to be applied with respect to a finding that matches the rule criteria. This is useful when a finding matches the criteria for multiple rules, and each rule has different actions. If a rule is terminal, Security Hub applies the rule action to a finding that matches the rule criteria and doesn't evaluate other rules for the finding. By default, a rule isn't terminal.

Type: Boolean
Required: No

RuleArn

The Amazon Resource Name (ARN) for the rule.

Type: String
Pattern: .*\S.*
Required: No

RuleName

The name of the rule.

Type: String
Pattern: .*\S.*
Required: No

**RuleOrder**

An integer ranging from 1 to 1000 that represents the order in which the rule action is applied to findings. Security Hub applies rules with lower values for this parameter first.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.
Required: No

**RuleStatus**

Whether the rule is active after it is created. If this parameter is equal to ENABLED, Security Hub starts applying the rule to findings and finding updates after the rule is created. To change the value of this parameter after creating a rule, use `BatchUpdateAutomationRules`.

Type: String

Valid Values: ENABLED | DISABLED
Required: No

**UpdatedAt**

A timestamp that indicates when the rule was most recently updated.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces. For example, `2020-03-22T13:22:13.933Z`.

Type: Timestamp

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws-sdk-docs.readthedocs.io/en/latest/api-reference/)
- [AWS SDK for Go](https://aws-sdk-docs.readthedocs.io/en/latest/api-reference/)
- [AWS SDK for Java V2](https://aws-sdk-docs.readthedocs.io/en/latest/api-reference/)
- [AWS SDK for Ruby V3](https://aws-sdk-docs.readthedocs.io/en/latest/api-reference/)
**AwsApiCallAction**

Provided if `ActionType` is `AWS_API_CALL`. It provides details about the API call that was detected.

**Contents**

**AffectedResources**

Identifies the resources that were affected by the API call.

*Type:* String to string map

*Key Pattern:* .*\S.*

*Value Pattern:* .*\S.*

*Required:* No

**Api**

The name of the API method that was issued.

*Type:* String

*Pattern:* .*\S.*

*Required:* No

**CallerType**

Indicates whether the API call originated from a remote IP address (`remoteip`) or from a DNS domain (`domain`).

*Type:* String

*Pattern:* .*\S.*

*Required:* No

**DomainDetails**

Provided if `CallerType` is `domain`. Provides information about the DNS domain that the API call originated from.

*Type:* [AwsApiCallActionDomainDetails](p. 403) object

*Required:* No

**FirstSeen**

An ISO8601-formatted timestamp that indicates when the API call was first observed.

A correctly formatted example is `2020-05-21T20:16:34.724Z`. The value cannot contain spaces, and date and time should be separated by `T`. For more information, see [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339).

*Type:* String

*Pattern:* .*\S.*

*Required:* No

**LastSeen**

An ISO8601-formatted timestamp that indicates when the API call was most recently observed.
A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: String
Pattern: .\S.*
Required: No

RemoteIpDetails

Provided if CallerType is remoteIp. Provides information about the remote IP address that the API call originated from.

Type: ActionRemoteIpDetails (p. 381) object

Required: No

ServiceName

The name of the AWS service that the API method belongs to.

Type: String
Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsApiCallActionDomainDetails**

Provided if `CallerType` is `domain`. It provides information about the DNS domain that issued the API call.

**Contents**

**Domain**

The name of the DNS domain that issued the API call.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)


**AwsSecurityFinding**

Provides a consistent format for Security Hub findings. **AwsSecurityFinding** format allows you to share findings between AWS security services and third-party solutions.

**Note**

A finding is a potential security issue generated either by AWS services or by the integrated third-party solutions and standards checks.

**Contents**

**AwsAccountId**

The AWS account ID that a finding is generated in.

Type: String

Pattern: .*\S.*

Required: Yes

**CreatedAt**

Indicates when the security findings provider created the potential security issue that a finding captured.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: Yes

**Description**

A finding's description.

**Note**

In this release, Description is a required property.

Type: String

Pattern: .*\S.*

Required: Yes

**GeneratorId**

The identifier for the solution-specific component (a discrete unit of logic) that generated a finding. In various security findings providers' solutions, this generator can be called a rule, a check, a detector, a plugin, etc.

Type: String

Pattern: .*\S.*

Required: Yes

**Id**

The security findings provider-specific identifier for a finding.
Type: String
Pattern: .*\S.*
Required: Yes

**ProductArn**

The ARN generated by Security Hub that uniquely identifies a product that generates findings. This can be the ARN for a third-party product that is integrated with Security Hub, or the ARN for a custom integration.

Type: String
Pattern: .*\S.*
Required: Yes

**Resources**

A set of resource data types that describe the resources that the finding refers to.

Type: Array of [Resource](#) objects

Required: Yes

**SchemaVersion**

The schema version that a finding is formatted for.

Type: String
Pattern: .*\S.*
Required: Yes

**Title**

A finding's title.

**Note**

In this release, **Title** is a required property.

Type: String
Pattern: .*\S.*
Required: Yes

**UpdatedAt**

Indicates when the security findings provider last updated the finding record.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: Yes

**Action**

Provides details about an action that affects or that was taken on a resource.
Type: Action (p. 377) object
Required: No

CompanyName

The name of the company for the product that generated the finding.

Security Hub populates this attribute automatically for each finding. You cannot update this attribute with BatchImportFindings or BatchUpdateFindings. The exception to this is a custom integration.

When you use the Security Hub console or API to filter findings by company name, you use this attribute.

Type: String
Pattern: .[^\S\.]*
Required: No

Compliance

This data type is exclusive to findings that are generated as the result of a check run against a specific rule in a supported security standard, such as CIS AWS Foundations. Contains security standard-related finding details.

Type: Compliance (p. 435) object
Required: No

Confidence

A finding's confidence. Confidence is defined as the likelihood that a finding accurately identifies the behavior or issue that it was intended to identify.

Confidence is scored on a 0-100 basis using a ratio scale, where 0 means zero percent confidence and 100 means 100 percent confidence.

Type: Integer
Required: No

Criticality

The level of importance assigned to the resources associated with the finding.

A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources.

Type: Integer
Required: No

FindingProviderFields

In a BatchImportFindings request, finding providers use FindingProviderFields to provide and update their own values for confidence, criticality, related findings, severity, and types.

Type: FindingProviderFields (p. 452) object
Required: No

FirstObservedAt

Indicates when the security findings provider first observed the potential security issue that a finding captured.
Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

LastObservedAt

Indicates when the security findings provider most recently observed the potential security issue that a finding captured.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

Malware

A list of malware related to a finding.

Type: Array of Malware (p. 465) objects
Required: No

Network

The details of network-related information about a finding.

Type: Network (p. 470) object
Required: No

NetworkPath

Provides information about a network path that is relevant to a finding. Each entry under NetworkPath represents a component of that path.

Type: Array of NetworkPathComponent (p. 475) objects
Required: No

Note

A user-defined note added to a finding.

Type: Note (p. 477) object
Required: No

PatchSummary

Provides an overview of the patch compliance status for an instance against a selected compliance standard.

Type: PatchSummary (p. 482) object
Required: No
Process

The details of process-related information about a finding.

Type: `ProcessDetails` (p. 486) object

Required: No

ProductFields

A data type where security findings providers can include additional solution-specific details that aren't part of the defined `AwsSecurityFinding` format.

Can contain up to 50 key-value pairs. For each key-value pair, the key can contain up to 128 characters, and the value can contain up to 2048 characters.

Type: String to string map

Key Pattern: `.*\S.*`

Value Pattern: `.*\S.*`

Required: No

ProductName

The name of the product that generated the finding.

Security Hub populates this attribute automatically for each finding. You cannot update this attribute with `BatchImportFindings` or `BatchUpdateFindings`. The exception to this is a custom integration.

When you use the Security Hub console or API to filter findings by product name, you use this attribute.

Type: String

Pattern: `.*\S.*`

Required: No

RecordState

The record state of a finding.

Type: String

Valid Values: ACTIVE | ARCHIVED

Required: No

Region

The Region from which the finding was generated.

Security Hub populates this attribute automatically for each finding. You cannot update it using `BatchImportFindings` or `BatchUpdateFindings`.

Type: String

Pattern: `.*\S.*`

Required: No
**RelatedFindings**

A list of related findings.

Type: Array of [RelatedFinding](#) objects

Required: No

**Remediation**

A data type that describes the remediation options for a finding.

Type: [Remediation](#) object

Required: No

**Sample**

Indicates whether the finding is a sample finding.

Type: Boolean

Required: No

**Severity**

A finding's severity.

Type: [Severity](#) object

Required: No

**SourceUrl**

A URL that links to a page about the current finding in the security findings provider's solution.

Type: String

Pattern: .*\S.*

Required: No

**ThreatIntelIndicators**

Threat intelligence details related to a finding.

Type: Array of [ThreatIntelIndicator](#) objects

Required: No

**Threats**

Details about the threat detected in a security finding and the file paths that were affected by the threat.

Type: Array of [Threat](#) objects

Required: No

**Types**

One or more finding types in the format of namespace/category/classifier that classify a finding.

Valid namespace values are: Software and Configuration Checks | TTPs | Effects | Unusual Behaviors | Sensitive Data Identifications

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Type: Array of strings
Pattern: .*\S.*
Required: No

**UserDefinedFields**

A list of name/value string pairs associated with the finding. These are custom, user-defined fields added to a finding.

Type: String to string map
Key Pattern: .*\S.*
Value Pattern: .*\S.*
Required: No

**VerificationState**

Indicates the veracity of a finding.

Type: String
Valid Values: UNKNOWN | TRUE_POSITIVE | FALSE_POSITIVE | BENIGN_POSITIVE
Required: No

**Vulnerabilities**

Provides a list of vulnerabilities associated with the findings.

Type: Array of [Vulnerability](p. 550) objects
Required: No

**Workflow**

Provides information about the status of the investigation into a finding.

Type: [Workflow](p. 554) object
Required: No

**WorkflowState**

*This member has been deprecated.*

The workflow state of a finding.

Type: String
Valid Values: NEW | ASSIGNED | IN_PROGRESS | DEFERRED | RESOLVED
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsSecurityFindingFilters**

A collection of attributes that are applied to all active Security Hub-aggregated findings and that result in a subset of findings that are included in this insight.

You can filter by up to 10 finding attributes. For each attribute, you can provide up to 20 filter values.

**Contents**

**AwsAccountId**

The AWS account ID that a finding is generated in.

Type: Array of [StringFilter](#) objects

Required: No

**CompanyName**

The name of the findings provider (company) that owns the solution (product) that generates findings.

Type: Array of [StringFilter](#) objects

Required: No

**ComplianceAssociatedStandardsId**

The unique identifier of a standard in which a control is enabled. This field consists of the resource portion of the Amazon Resource Name (ARN) returned for a standard in the [DescribeStandards](#) API response.

Type: Array of [StringFilter](#) objects

Required: No

**ComplianceSecurityControlId**

The unique identifier of a control across standards. Values for this field typically consist of an AWS service and a number, such as APIGateway.5.

Type: Array of [StringFilter](#) objects

Required: No

**ComplianceStatus**

Exclusive to findings that are generated as the result of a check run against a specific rule in a supported standard, such as CIS AWS Foundations. Contains security standard-related finding details.

Type: Array of [StringFilter](#) objects

Required: No

**Confidence**

A finding's confidence. Confidence is defined as the likelihood that a finding accurately identifies the behavior or issue that it was intended to identify.

Confidence is scored on a 0-100 basis using a ratio scale, where 0 means zero percent confidence and 100 means 100 percent confidence.

Type: Array of [NumberFilter](#) objects
**CreatedAt**

An ISO8601-formatted timestamp that indicates when the security findings provider captured the potential security issue that a finding captured.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339).

Type: Array of [DateFilter (p. 443)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

**Criticality**

The level of importance assigned to the resources associated with the finding.

A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources.

Type: Array of [NumberFilter (p. 479)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

**Description**

A finding's description.

Type: Array of [StringFilter (p. 539)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

**FindingProviderFieldsConfidence**

The finding provider value for the finding confidence. Confidence is defined as the likelihood that a finding accurately identifies the behavior or issue that it was intended to identify.

Confidence is scored on a 0-100 basis using a ratio scale, where 0 means zero percent confidence and 100 means 100 percent confidence.

Type: Array of [NumberFilter (p. 479)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

**FindingProviderFieldsCriticality**

The finding provider value for the level of importance assigned to the resources associated with the findings.

A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources.

Type: Array of [NumberFilter (p. 479)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

**FindingProviderFieldsRelatedFindingsId**

The finding identifier of a related finding that is identified by the finding provider.

Type: Array of [StringFilter (p. 539)](https://docs.aws.amazon.com/securityhub/latest/APIReference/APIAwsSecurityFindingFilters.html) objects

Required: No
FindingProviderFieldsRelatedFindingsProductArn

The ARN of the solution that generated a related finding that is identified by the finding provider.

Type: Array of StringFilter (p. 539) objects

Required: No

FindingProviderFieldsSeverityLabel

The finding provider value for the severity label.

Type: Array of StringFilter (p. 539) objects

Required: No

FindingProviderFieldsSeverityOriginal

The finding provider's original value for the severity.

Type: Array of StringFilter (p. 539) objects

Required: No

FindingProviderFieldsTypes

One or more finding types that the finding provider assigned to the finding. Uses the format of namespace/category/classifier that classify a finding.

Valid namespace values are: Software and Configuration Checks | TTPs | Effects | Unusual Behaviors | Sensitive Data Identifications

Type: Array of StringFilter (p. 539) objects

Required: No

FirstObservedAt

An ISO8601-formatted timestamp that indicates when the security findings provider first observed the potential security issue that a finding captured.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: Array of DateFilter (p. 443) objects

Required: No

GeneratorId

The identifier for the solution-specific component (a discrete unit of logic) that generated a finding. In various security findings providers' solutions, this generator can be called a rule, a check, a detector, a plugin, etc.

Type: Array of StringFilter (p. 539) objects

Required: No

Id

The security findings provider-specific identifier for a finding.

Type: Array of StringFilter (p. 539) objects

Required: No
Keyword

This member has been deprecated.

A keyword for a finding.

Type: Array of `KeywordFilter (p. 464)` objects

Required: No

LastObservedAt

An ISO8601-formatted timestamp that indicates when the security findings provider most recently observed the potential security issue that a finding captured.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: Array of `DateFilter (p. 443)` objects

Required: No

MalwareName

The name of the malware that was observed.

Type: Array of `StringFilter (p. 539)` objects

Required: No

MalwarePath

The filesystem path of the malware that was observed.

Type: Array of `StringFilter (p. 539)` objects

Required: No

MalwareState

The state of the malware that was observed.

Type: Array of `StringFilter (p. 539)` objects

Required: No

MalwareType

The type of the malware that was observed.

Type: Array of `StringFilter (p. 539)` objects

Required: No

NetworkDestinationDomain

The destination domain of network-related information about a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

NetworkDestinationIpV4

The destination IPv4 address of network-related information about a finding.
Type: Array of IpFilter (p. 462) objects
Required: No

**NetworkDestinationIpV6**

The destination IPv6 address of network-related information about a finding.
Type: Array of IpFilter (p. 462) objects
Required: No

**NetworkDestinationPort**

The destination port of network-related information about a finding.
Type: Array of NumberFilter (p. 479) objects
Required: No

**NetworkDirection**

Indicates the direction of network traffic associated with a finding.
Type: Array of StringFilter (p. 539) objects
Required: No

**NetworkProtocol**

The protocol of network-related information about a finding.
Type: Array of StringFilter (p. 539) objects
Required: No

**NetworkSourceDomain**

The source domain of network-related information about a finding.
Type: Array of StringFilter (p. 539) objects
Required: No

**NetworkSourceIpV4**

The source IPv4 address of network-related information about a finding.
Type: Array of IpFilter (p. 462) objects
Required: No

**NetworkSourceIpV6**

The source IPv6 address of network-related information about a finding.
Type: Array of IpFilter (p. 462) objects
Required: No

**NetworkSourceMac**

The source media access control (MAC) address of network-related information about a finding.
Type: Array of StringFilter (p. 539) objects
Required: No
**NetworkSourcePort**

The source port of network-related information about a finding.

Type: Array of [NumberFilter (p. 479)] objects

Required: No

**NoteText**

The text of a note.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**NoteUpdatedAt**

The timestamp of when the note was updated.

Type: Array of [DateFilter (p. 443)] objects

Required: No

**NoteUpdatedBy**

The principal that created a note.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ProcessLaunchedAt**

A timestamp that identifies when the process was launched.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6).

Type: Array of [DateFilter (p. 443)] objects

Required: No

**ProcessName**

The name of the process.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ProcessParentPid**

The parent process ID. This field accepts positive integers between 0 and 2147483647.

Type: Array of [NumberFilter (p. 479)] objects

Required: No

**ProcessPath**

The path to the process executable.

Type: Array of [StringFilter (p. 539)] objects

Required: No
ProcessPid

The process ID.

Type: Array of NumberFilter objects

Required: No

ProcessTerminatedAt

A timestamp that identifies when the process was terminated.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: Array of DateFilter objects

Required: No

ProductArn

The ARN generated by Security Hub that uniquely identifies a third-party company (security findings provider) after this provider’s product (solution that generates findings) is registered with Security Hub.

Type: Array of StringFilter objects

Required: No

ProductFields

A data type where security findings providers can include additional solution-specific details that aren’t part of the defined AwsSecurityFinding format.

Type: Array of MapFilter objects

Required: No

ProductName

The name of the solution (product) that generates findings.

Type: Array of StringFilter objects

Required: No

RecommendationText

The recommendation of what to do about the issue described in a finding.

Type: Array of StringFilter objects

Required: No

RecordState

The updated record state for the finding.

Type: Array of StringFilter objects

Required: No

Region

The Region from which the finding was generated.
Type: Array of [StringFilter (p. 539)] objects

Required: No

**RelatedFindingsId**

The solution-generated identifier for a related finding.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**RelatedFindingsProductArn**

The ARN of the solution that generated a related finding.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ResourceAwsEc2InstanceIamInstanceProfileArn**

The IAM profile ARN of the instance.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ResourceAwsEc2InstanceImageId**

The Amazon Machine Image (AMI) ID of the instance.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ResourceAwsEc2InstanceIpV4Addresses**

The IPv4 addresses associated with the instance.

Type: Array of [IpFilter (p. 462)] objects

Required: No

**ResourceAwsEc2InstanceIpV6Addresses**

The IPv6 addresses associated with the instance.

Type: Array of [IpFilter (p. 462)] objects

Required: No

**ResourceAwsEc2InstanceKeyName**

The key name associated with the instance.

Type: Array of [StringFilter (p. 539)] objects

Required: No

**ResourceAwsEc2InstanceLaunchedAt**

The date and time the instance was launched.

Type: Array of [DateFilter (p. 443)] objects

Required: No
ResourceAwsEc2InstanceSubnetId

The identifier of the subnet that the instance was launched in.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsEc2InstanceType

The instance type of the instance.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsEc2InstanceVpcId

The identifier of the VPC that the instance was launched in.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsIamAccessKeyCreatedAt

The creation date/time of the IAM access key related to a finding.

Type: Array of `DateFilter (p. 443)` objects

Required: No

ResourceAwsIamAccessKeyPrincipalName

The name of the principal that is associated with an IAM access key.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsIamAccessKeyStatus

The status of the IAM access key related to a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsIamAccessKeyUserName

This member has been deprecated.

The user associated with the IAM access key related to a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

ResourceAwsIamUserUserName

The name of an IAM user.

Type: Array of `StringFilter (p. 539)` objects

Required: No
ResourceAwsS3BucketOwnerId

The canonical user ID of the owner of the S3 bucket.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceAwsS3BucketOwnerName

The display name of the owner of the S3 bucket.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceContainerImageId

The identifier of the image related to a finding.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceContainerImageName

The name of the image related to a finding.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceContainerLaunchedAt

A timestamp that identifies when the container was started.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: Array of DateFilter (p. 443) objects

Required: No

ResourceContainerName

The name of the container related to a finding.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceDetailsOther

The details of a resource that doesn't have a specific subfield for the resource type defined.

Type: Array of MapFilter (p. 466) objects

Required: No

ResourceId

The canonical identifier for the given resource type.

Type: Array of StringFilter (p. 539) objects

Required: No
ResourcePartition

The canonical AWS partition name that the Region is assigned to.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceRegion

The canonical AWS external Region name where this resource is located.

Type: Array of StringFilter (p. 539) objects

Required: No

ResourceTags

A list of AWS tags associated with a resource at the time the finding was processed.

Type: Array of MapFilter (p. 466) objects

Required: No

ResourceType

Specifies the type of the resource that details are provided for.

Type: Array of StringFilter (p. 539) objects

Required: No

Sample

Indicates whether or not sample findings are included in the filter results.

Type: Array of BooleanFilter (p. 429) objects

Required: No

SeverityLabel

The label of a finding's severity.

Type: Array of StringFilter (p. 539) objects

Required: No

SeverityNormalized

This member has been deprecated.

The normalized severity of a finding.

Type: Array of NumberFilter (p. 479) objects

Required: No

SeverityProduct

This member has been deprecated.

The native severity as defined by the security findings provider's solution that generated the finding.

Type: Array of NumberFilter (p. 479) objects

Required: No
SourceUrl
A URL that links to a page about the current finding in the security findings provider's solution.
Type: Array of `StringFilter (p. 539)` objects
Required: No

ThreatIntelIndicatorCategory
The category of a threat intelligence indicator.
Type: Array of `StringFilter (p. 539)` objects
Required: No

ThreatIntelIndicatorLastObservedAt
A timestamp that identifies the last observation of a threat intelligence indicator.
Type: Array of `DateFilter (p. 443)` objects
Required: No

ThreatIntelIndicatorSource
The source of the threat intelligence.
Type: Array of `StringFilter (p. 539)` objects
Required: No

ThreatIntelIndicatorSourceUrl
The URL for more details from the source of the threat intelligence.
Type: Array of `StringFilter (p. 539)` objects
Required: No

ThreatIntelIndicatorType
The type of a threat intelligence indicator.
Type: Array of `StringFilter (p. 539)` objects
Required: No

ThreatIntelIndicatorValue
The value of a threat intelligence indicator.
Type: Array of `StringFilter (p. 539)` objects
Required: No

Title
A finding's title.
Type: Array of `StringFilter (p. 539)` objects
Required: No

Type
A finding type in the format of `namespace/category/classifier` that classifies a finding.
Type: Array of `StringFilter (p. 539)` objects

Required: No

**UpdatedAt**

An ISO8601-formatted timestamp that indicates when the security findings provider last updated the finding record.

A correctly formatted example is `2020-05-21T20:16:34.724Z`. The value cannot contain spaces, and date and time should be separated by `T`. For more information, see [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339).

Type: Array of `DateFilter (p. 443)` objects

Required: No

**UserDefinedFields**

A list of name/value string pairs associated with the finding. These are custom, user-defined fields added to a finding.

Type: Array of `MapFilter (p. 466)` objects

Required: No

**VerificationState**

The veracity of a finding.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**WorkflowState**

The workflow state of a finding.

Note that this field is deprecated. To search for a finding based on its workflow status, use `WorkflowStatus`.

Type: Array of `StringFilter (p. 539)` objects

Required: No

**WorkflowStatus**

The status of the investigation into a finding. Allowed values are the following.

- **NEW** - The initial state of a finding, before it is reviewed.

  Security Hub also resets the workflow status from NOTIFIED or RESOLVED to NEW in the following cases:
  - `RecordState` changes from ARCHIVED to ACTIVE.
  - `Compliance.Status` changes from PASSED to either WARNING, FAILED, or NOT_AVAILABLE.
  - **NOTIFIED** - Indicates that the resource owner has been notified about the security issue. Used when the initial reviewer is not the resource owner, and needs intervention from the resource owner.

  If one of the following occurs, the workflow status is changed automatically from NOTIFIED to NEW:
  - `RecordState` changes from ARCHIVED to ACTIVE.
  - `Compliance.Status` changes from PASSED to FAILED, WARNING, or NOT_AVAILABLE.
• SUPPRESSED - Indicates that you reviewed the finding and do not believe that any action is needed.

The workflow status of a SUPPRESSED finding does not change if RecordState changes from ARCHIVED to ACTIVE.

• RESOLVED - The finding was reviewed and remediated and is now considered resolved.

The finding remains RESOLVED unless one of the following occurs:

• RecordState changes from ARCHIVED to ACTIVE.
• Compliance.Status changes from PASSED to FAILED, WARNING, or NOT_AVAILABLE.

In those cases, the workflow status is automatically reset to NEW.

For findings from controls, if Compliance.Status is PASSED, then Security Hub automatically sets the workflow status to RESOLVED.

Type: Array of StringFilter (p. 539) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsSecurityFindingIdentifier**

Identifies which finding to get the finding history for.

**Contents**

**Id**

The identifier of the finding that was specified by the finding provider.

Type: String

Pattern: `.\S.*`

Required: Yes

**ProductArn**

The ARN generated by Security Hub that uniquely identifies a product that generates findings. This can be the ARN for a third-party product that is integrated with Security Hub, or the ARN for a custom integration.

Type: String

Pattern: `.\S.*`

Required: Yes

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
BatchUpdateFindingsUnprocessedFinding

A finding from a BatchUpdateFindings request that Security Hub was unable to update.

Contents

**ErrorCode**

The code associated with the error. Possible values are:

- **ConcurrentUpdateError** - Another request attempted to update the finding while this request was being processed. This error may also occur if you call BatchUpdateFindings and BatchImportFindings at the same time.
- **DuplicatedFindingIdentifier** - The request included two or more findings with the same FindingIdentifier.
- **FindingNotFound** - The FindingIdentifier included in the request did not match an existing finding.
- **FindingSizeExceeded** - The finding size was greater than the permissible value of 240 KB.
- **InternalFailure** - An internal service failure occurred when updating the finding.
- **InvalidInput** - The finding update contained an invalid value that did not satisfy the AWS Security Finding Format syntax.

Type: String

Pattern: .*\S.*

Required: Yes

**ErrorMessage**

The message associated with the error. Possible values are:

- Concurrent finding updates detected
- Finding Identifier is duplicated
- Finding Not Found
- Finding size exceeded 240 KB
- Internal service failure
- Invalid Input

Type: String

Pattern: .*\S.*

Required: Yes

**FindingIdentifier**

The identifier of the finding that was not updated.

Type: AwsSecurityFindingIdentifier (p. 426) object

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
BooleanFilter

Boolean filter for querying findings.

Contents

Value

The value of the boolean.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Cell

An occurrence of sensitive data detected in a Microsoft Excel workbook, comma-separated value (CSV) file, or tab-separated value (TSV) file.

Contents

CellReference

For a Microsoft Excel workbook, provides the location of the cell, as an absolute cell reference, that contains the data. For example, Sheet2!C5 for cell C5 on Sheet2.

Type: String
Pattern: .*\S.*
Required: No

Column

The column number of the column that contains the data. For a Microsoft Excel workbook, the column number corresponds to the alphabetical column identifiers. For example, a value of 1 for Column corresponds to the A column in the workbook.

Type: Long
Required: No

ColumnName

The name of the column that contains the data.

Type: String
Pattern: .*\S.*
Required: No

Row

The row number of the row that contains the data.

Type: Long
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
City

Information about a city.

Contents

CityName

The name of the city.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ClassificationResult

Details about the sensitive data that was detected on the resource.

Contents

AdditionalOccurrences

Indicates whether there are additional occurrences of sensitive data that are not included in the finding. This occurs when the number of occurrences exceeds the maximum that can be included.

Type: Boolean

Required: No

CustomDataIdentifiers

Provides details about sensitive data that was identified based on customer-defined configuration.

Type: CustomDataIdentifiersResult (p. 439) object

Required: No

MimeType

The type of content that the finding applies to.

Type: String

Pattern: \S.*

Required: No

SensitiveData

Provides details about sensitive data that was identified based on built-in configuration.

Type: Array of SensitiveDataResult (p. 515) objects

Required: No

SizeClassified

The total size in bytes of the affected data.

Type: Long

Required: No

Status

The current status of the sensitive data detection.

Type: ClassificationStatus (p. 434) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
ClassificationStatus

Provides details about the current status of the sensitive data detection.

Contents

Code

The code that represents the status of the sensitive data detection.

Type: String

Pattern: .*\S.*

Required: No

Reason

A longer description of the current status of the sensitive data detection.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Compliance

Contains finding details that are specific to control-based findings. Only returned for findings generated from controls.

Contents

AssociatedStandards

The enabled security standards in which a security control is currently enabled.

Type: Array of AssociatedStandard (p. 386) objects

Required: No

RelatedRequirements

For a control, the industry or regulatory framework requirements that are related to the control. The check for that control is aligned with these requirements.

Type: Array of strings

Pattern: .*\S.*

Required: No

SecurityControlId

The unique identifier of a control across standards. Values for this field typically consist of an AWS service and a number, such as APIGateway.5.

Type: String

Pattern: .*\S.*

Required: No

Status

The result of a standards check.

The valid values for Status are as follows.

- PASSED - Standards check passed for all evaluated resources.
- WARNING - Some information is missing or this check is not supported for your configuration.
- FAILED - Standards check failed for at least one evaluated resource.
- NOT_AVAILABLE - Check could not be performed due to a service outage, API error, or because the result of the AWS Config evaluation was NOT_APPLICABLE. If the AWS Config evaluation result was NOT_APPLICABLE, then after 3 days, Security Hub automatically archives the finding.

Type: String

Valid Values: PASSED | WARNING | FAILED | NOT_AVAILABLE

Required: No

StatusReasons

For findings generated from controls, a list of reasons behind the value of Status. For the list of status reason codes and their meanings, see Standards-related information in the ASFF in the AWS Security Hub User Guide.
Type: Array of [StatusReason (p. 538)] objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Country

Information about a country.

Contents

CountryCode

The 2-letter ISO 3166 country code for the country.

Type: String

Pattern: .\S.*

Required: No

CountryName

The name of the country.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CustomDataIdentifiersDetections

The list of detected instances of sensitive data.

Contents

Arn

The ARN of the custom identifier that was used to detect the sensitive data.

Type: String
Pattern: .*\S.*
Required: No

Count

The total number of occurrences of sensitive data that were detected.

Type: Long
Required: No

Name

The name of the custom identifier that detected the sensitive data.

Type: String
Pattern: .*\S.*
Required: No

Occurrences

Details about the sensitive data that was detected.

Type: Occurrences (p. 480) object
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CustomDataIdentifiersResult

Contains an instance of sensitive data that was detected by a customer-defined identifier.

Contents

**Detections**

The list of detected instances of sensitive data.

Type: Array of CustomDataIdentifiersDetections (p. 438) objects

Required: No

**TotalCount**

The total number of occurrences of sensitive data.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Cvss

CVSS scores from the advisory related to the vulnerability.

Contents

Adjustments

Adjustments to the CVSS metrics.

Type: Array of Adjustment (p. 384) objects

Required: No

BaseScore

The base CVSS score.

Type: Double

Required: No

BaseVector

The base scoring vector for the CVSS score.

Type: String

Pattern: .*\S.*

Required: No

Source

The origin of the original CVSS score and vector.

Type: String

Pattern: .*\S.*

Required: No

Version

The version of CVSS for the CVSS score.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
DataClassificationDetails

Provides details about sensitive data that was detected on a resource.

Contents

DetailedResultsLocation

The path to the folder or file that contains the sensitive data.

Type: String

Pattern: .*\S.*

Required: No

Result

The details about the sensitive data that was detected on the resource.

Type: ClassificationResult (p. 432) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
DateFilter

A date filter for querying findings.

Contents

DateRange

A date range for the date filter.

Type: DateRange \( \text{p. 444} \) object

Required: No

End

A timestamp that provides the end date for the date filter.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: String

Pattern: .\S.*

Required: No

Start

A timestamp that provides the start date for the date filter.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
DateRange
A date range for the date filter.

Contents

Unit
A date range unit for the date filter.
Type: String
Valid Values: DAYS
Required: No

Value
A date range value for the date filter.
Type: Integer
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
DnsRequestAction

Provided if ActionType is DNS_REQUEST. It provides details about the DNS request that was detected.

Contents

Blocked

Indicates whether the DNS request was blocked.

Type: Boolean

Required: No

Domain

The DNS domain that is associated with the DNS request.

Type: String

Pattern: .*\S.*

Required: No

Protocol

The protocol that was used for the DNS request.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FilePaths

Provides information about the file paths that were affected by the threat.

Contents

FileName

The name of the infected or suspicious file corresponding to the hash.

Type: String

Pattern: .*\S.*

Required: No

FilePath

Path to the infected or suspicious file on the resource it was detected on.

Type: String

Pattern: .*\S.*

Required: No

Hash

The hash value for the infected or suspicious file.

Type: String

Pattern: .*\S.*

Required: No

ResourceId

The Amazon Resource Name (ARN) of the resource on which the threat was detected.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FindingAggregator

A finding aggregator. A finding aggregator contains the configuration for finding aggregation.

Contents

**FindingAggregatorArn**

The ARN of the finding aggregator. You use the finding aggregator ARN to retrieve details for, update, and delete the finding aggregator.

Type: String

Pattern: .*\S .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-c++/latest/api/index.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/v1/index.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java/v1/developer-guide/index.html)
FindingHistoryRecord

A list of events that changed the specified finding during the specified time period. Each record represents a single finding change event.

Contents

FindingCreated

Identifies whether the event marks the creation of a new finding. A value of True means that the finding is newly created. A value of False means that the finding isn't newly created.

Type: Boolean

Required: No

FindingIdentifier

Identifies which finding to get the finding history for.

Type: AwsSecurityFindingIdentifier (p. 426) object

Required: No

NextToken

A token for pagination purposes. Provide this token in the subsequent request to GetFindingsHistory to get up to an additional 100 results of history for the same finding that you specified in your initial request.

Type: String

Required: No

Updates

An array of objects that provides details about the finding change event, including the AWS Security Finding Format (ASFF) field that changed, the value of the field before the change, and the value of the field after the change.

Type: Array of FindingHistoryUpdate (p. 450) objects

Required: No

UpdateSource

Identifies the source of the event that changed the finding. For example, an integrated AWS service or third-party partner integration may call BatchImportFindings, or an AWS Security Hub customer may call BatchUpdateFindings.

Type: FindingHistoryUpdateSource (p. 451) object

Required: No

UpdateTime

An ISO 8601-formatted timestamp that indicates when Security Hub processed the updated finding record.

A correctly formatted example is 2020-05-21T20:16:34.724Z. The value cannot contain spaces, and date and time should be separated by T. For more information, see RFC 3339 section 5.6, Internet Date/Time Format.
Type: Timestamp
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FindingHistoryUpdate

An array of objects that provides details about a change to a finding, including the AWS Security Finding Format (ASFF) field that changed, the value of the field before the change, and the value of the field after the change.

Contents

NewValue

The value of the ASFF field after the finding change event. To preserve storage and readability, Security Hub omits this value if FindingHistoryRecord exceeds database limits.

Type: String

Pattern: .*\S.*

Required: No

OldValue

The value of the ASFF field before the finding change event.

Type: String

Pattern: .*\S.*

Required: No

UpdatedField

The ASFF field that changed during the finding change event.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FindingHistoryUpdateSource

Identifies the source of the finding change event.

Contents

Identity

The identity of the source that initiated the finding change event. For example, the Amazon Resource Name (ARN) of a partner that calls BatchImportFindings or of a customer that calls BatchUpdateFindings.

Type: String
Pattern: .\S.*
Required: No

Type

Describes the type of finding change event, such as a call to BatchImportFindings (by an integrated AWS service or third party partner integration) or BatchUpdateFindings (by a Security Hub customer).

Type: String

Valid Values: BATCH_UPDATE_FINDINGS | BATCH_IMPORT_FINDINGS
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FindingProviderFields

In a BatchImportFindings request, finding providers use FindingProviderFields to provide and update values for confidence, criticality, related findings, severity, and types.

Contents

Confidence

A finding's confidence. Confidence is defined as the likelihood that a finding accurately identifies the behavior or issue that it was intended to identify.

Confidence is scored on a 0-100 basis using a ratio scale, where 0 means zero percent confidence and 100 means 100 percent confidence.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

Criticality

The level of importance assigned to the resources associated with the finding.

A score of 0 means that the underlying resources have no criticality, and a score of 100 is reserved for the most critical resources.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

RelatedFindings

A list of findings that are related to the current finding.

Type: Array of RelatedFinding (p. 493) objects

Required: No

Severity

The severity of a finding.

Type: FindingProviderSeverity (p. 454) object

Required: No

Types

One or more finding types in the format of namespace/category/classifier that classify a finding.

Valid namespace values are: Software and Configuration Checks | TTPs | Effects | Unusual Behaviors | Sensitive Data Identifications

Type: Array of strings

Pattern: .[^\S.*]

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FindingProviderSeverity

The severity assigned to the finding by the finding provider.

Contents

Label

The severity label assigned to the finding by the finding provider.

Type: String

Valid Values: INFORMATIONAL | LOW | MEDIUM | HIGH | CRITICAL

Required: No

Original

The finding provider's original value for the severity.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
GeoLocation

Provides the latitude and longitude coordinates of a location.

Contents

**Lat**

The latitude of the location.

Type: Double

Required: No

**Lon**

The longitude of the location.

Type: Double

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
IcmpTypeCode

An Internet Control Message Protocol (ICMP) type and code.

Contents

Code

The ICMP code for which to deny or allow access. To deny or allow all codes, use the value -1.

Type: Integer
Required: No

Type

The ICMP type for which to deny or allow access. To deny or allow all types, use the value -1.

Type: Integer
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**ImportFindingsError**

The list of the findings that cannot be imported. For each finding, the list provides the error.

**Contents**

**ErrorCode**

The code of the error returned by the BatchImportFindings operation.

- Type: String
- Pattern: .*\S.*
- Required: Yes

**ErrorMessage**

The message of the error returned by the BatchImportFindings operation.

- Type: String
- Pattern: .*\S.*
- Required: Yes

**Id**

The identifier of the finding that could not be updated.

- Type: String
- Pattern: .*\S.*
- Required: Yes

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Insight

Contains information about a Security Hub insight.

Contents

Filters

One or more attributes used to filter the findings included in the insight. The insight only includes findings that match the criteria defined in the filters.

Type: `AwsSecurityFindingFilters (p. 412)` object

Required: Yes

GroupByAttribute

The grouping attribute for the insight’s findings. Indicates how to group the matching findings, and identifies the type of item that the insight applies to. For example, if an insight is grouped by resource identifier, then the insight produces a list of resource identifiers.

Type: String

Pattern: `.*\S.*`

Required: Yes

InsightArn

The ARN of a Security Hub insight.

Type: String

Pattern: `.*\S.*`

Required: Yes

Name

The name of a Security Hub insight.

Type: String

Pattern: `.*\S.*`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
InsightResults

The insight results returned by the GetInsightResults operation.

Contents

**GroupByAttribute**

The attribute that the findings are grouped by for the insight whose results are returned by the GetInsightResults operation.

Type: String

Pattern: .*\S.*

Required: Yes

**InsightArn**

The ARN of the insight whose results are returned by the GetInsightResults operation.

Type: String

Pattern: .*\S.*

Required: Yes

**ResultValues**

The list of insight result values returned by the GetInsightResults operation.

Type: Array of [InsightResultValue](p. 460) objects

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
InsightResultValue

The insight result values returned by the GetInsightResults operation.

Contents

Count

The number of findings returned for each GroupByAttributeValue.

Type: Integer

Required: Yes

GroupByAttributeValue

The value of the attribute that the findings are grouped by for the insight whose results are returned by the GetInsightResults operation.

Type: String

Pattern: .*\S.*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Invitation
Details about an invitation.

Contents

AccountId
The account ID of the Security Hub administrator account that the invitation was sent from.
Type: String
Required: No

InvitationId
The ID of the invitation sent to the member account.
Type: String
Pattern: .*\S.*
Required: No

InvitedAt
The timestamp of when the invitation was sent.
Type: Timestamp
Required: No

MemberStatus
The current status of the association between the member and administrator accounts.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
IpFilter

The IP filter for querying findings.

Contents

Cidr

A finding's CIDR value.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
IpOrganizationDetails

Provides information about an internet provider.

Contents

Asn

The Autonomous System Number (ASN) of the internet provider

Type: Integer

Required: No

AsnOrg

The name of the organization that registered the ASN.

Type: String

Pattern: .*\S.*

Required: No

Isp

The ISP information for the internet provider.

Type: String

Pattern: .*\S.*

Required: No

Org

The name of the internet provider.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
KeywordFilter

A keyword filter for querying findings.

Contents

Value

A value for the keyword.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Malware

A list of malware related to a finding.

Contents

Name

The name of the malware that was observed.

Type: String

Pattern: .*\S.*

Required: Yes

Path

The file system path of the malware that was observed.

Type: String

Pattern: .*\S.*

Required: No

State

The state of the malware that was observed.

Type: String

Valid Values: OBSERVED | REMOVAL_FAILED | REMOVED

Required: No

Type

The type of the malware that was observed.

Type: String

Valid Values: ADWARE | BLENDED_THREAT | BOTNET_AGENT | COIN_MINER | EXPLOIT_KIT | KEYLOGGER | MACRO | POTENTIALLY_UNWANTED | SPYWARE | RANSOMWARE | REMOTE_ACCESS | ROOTKIT | TROJAN | VIRUS | WORM

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
MapFilter

A map filter for filtering AWS Security Hub findings. Each map filter provides the field to check for, the value to check for, and the comparison operator.

Contents

Comparison

The condition to apply to the key value when filtering Security Hub findings with a map filter.

To search for values that have the filter value, use one of the following comparison operators:

- To search for values that include the filter value, use CONTAINS. For example, for the ResourceTags field, the filter Department CONTAINS Security matches findings that include the value Security for the Department tag. In the same example, a finding with a value of Security team for the Department tag is a match.
- To search for values that exactly match the filter value, use EQUALS. For example, for the ResourceTags field, the filter Department EQUALS Security matches findings that have the value Security for the Department tag.

CONTAINS and EQUALS filters on the same field are joined by OR. A finding matches if it matches any one of those filters. For example, the filters Department CONTAINS Security OR Department CONTAINS Finance match a finding that includes either Security, Finance, or both values.

To search for values that don't have the filter value, use one of the following comparison operators:

- To search for values that exclude the filter value, use NOT_CONTAINS. For example, for the ResourceTags field, the filter Department NOT_CONTAINS Finance matches findings that exclude the value Finance for the Department tag.
- To search for values other than the filter value, use NOT_EQUALS. For example, for the ResourceTags field, the filter Department NOT_EQUALS Finance matches findings that don't have the value Finance for the Department tag.

NOT_CONTAINS and NOT_EQUALS filters on the same field are joined by AND. A finding matches only if it matches all of those filters. For example, the filters Department NOT_CONTAINS Security AND Department NOT_CONTAINS Finance match a finding that excludes both the Security and Finance values.

CONTAINS filters can only be used with other CONTAINS filters. NOT_CONTAINS filters can only be used with other NOT_CONTAINS filters.

You can't have both a CONTAINS filter and a NOT_CONTAINS filter on the same field. Similarly, you can't have both an EQUALS filter and a NOT_EQUALS filter on the same field. Combining filters in this way returns an error.

CONTAINS and NOT_CONTAINS operators can be used only with automation rules. For more information, see Automation rules in the AWS Security Hub User Guide.

Type: String

Valid Values: EQUALS | NOT_EQUALS | CONTAINS | NOT_CONTAINS

Required: No

Key:

The key of the map filter. For example, for ResourceTags, Key identifies the name of the tag. For UserDefinedFields, Key is the name of the field.
Type: String
Pattern: .*\S.*
Required: No

**Value**

The value for the key in the map filter. Filter values are case sensitive. For example, one of the values for a tag called `Department` might be `Security`. If you provide `security` as the filter value, then there's no match.

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Member

The details about a member account.

Contents

AccountId

The AWS account ID of the member account.

Type: String

Required: No

AdministratorId

The AWS account ID of the Security Hub administrator account associated with this member account.

Type: String

Pattern: .*

Required: No

Email

The email address of the member account.

Type: String

Pattern: .*

Required: No

InvitedAt

A timestamp for the date and time when the invitation was sent to the member account.

Type: Timestamp

Required: No

MasterId

This member has been deprecated.

This is replaced by AdministratorID.

The AWS account ID of the Security Hub administrator account associated with this member account.

Type: String

Pattern: .*

Required: No

MemberStatus

The status of the relationship between the member account and its administrator account.

The status can have one of the following values:

• Created - Indicates that the administrator account added the member account, but has not yet invited the member account.
- **Invited** - Indicates that the administrator account invited the member account. The member account has not yet responded to the invitation.
- **Enabled** - Indicates that the member account is currently active. For manually invited member accounts, indicates that the member account accepted the invitation.
- **Removed** - Indicates that the administrator account disassociated the member account.
- **Resigned** - Indicates that the member account disassociated themselves from the administrator account.
- **Deleted** - Indicates that the administrator account deleted the member account.
- **AccountSuspended** - Indicates that an organization account was suspended from AWS at the same time that the administrator account tried to enable the organization account as a member account.

**Type:** String

**Pattern:** .\S.*

**Required:** No

**UpdatedAt**

The timestamp for the date and time when the member account was updated.

**Type:** Timestamp

**Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Network

The details of network-related information about a finding.

Contents

**DestinationDomain**

The destination domain of network-related information about a finding.

- Type: String
- Pattern: .*'\S.*
- Required: No

**DestinationIpV4**

The destination IPv4 address of network-related information about a finding.

- Type: String
- Pattern: .*'\S.*
- Required: No

**DestinationIpV6**

The destination IPv6 address of network-related information about a finding.

- Type: String
- Pattern: .*'\S.*
- Required: No

**DestinationPort**

The destination port of network-related information about a finding.

- Type: Integer
- Required: No

**Direction**

The direction of network traffic associated with a finding.

- Type: String
- Valid Values: IN | OUT
- Required: No

**OpenPortRange**

The range of open ports that is present on the network.

- Type: PortRange (p. 775) object
- Required: No

**Protocol**

The protocol of network-related information about a finding.
Type: String
Pattern: \S.*
Required: No

**SourceDomain**
The source domain of network-related information about a finding.
Type: String
Pattern: \S.*
Required: No

**SourceIpV4**
The source IPv4 address of network-related information about a finding.
Type: String
Pattern: \S.*
Required: No

**SourceIpV6**
The source IPv6 address of network-related information about a finding.
Type: String
Pattern: \S.*
Required: No

**SourceMac**
The source media access control (MAC) address of network-related information about a finding.
Type: String
Pattern: \S.*
Required: No

**SourcePort**
The source port of network-related information about a finding.
Type: Integer
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
NetworkConnectionAction

Provided if ActionType is NETWORK_CONNECTION. It provides details about the attempted network connection that was detected.

Contents

Blocked

Indicates whether the network connection attempt was blocked.

Type: Boolean

Required: No

ConnectionDirection

The direction of the network connection request (IN or OUT).

Type: String

Pattern: .\S.*

Required: No

LocalPortDetails

Information about the port on the EC2 instance.

Type: ActionLocalPortDetails (p. 380) object

Required: No

Protocol

The protocol used to make the network connection request.

Type: String

Pattern: .\S.*

Required: No

RemoteIpDetails

Information about the remote IP address that issued the network connection request.

Type: ActionRemoteIpDetails (p. 381) object

Required: No

RemotePortDetails

Information about the port on the remote IP address.

Type: ActionRemotePortDetails (p. 382) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
NetworkPathComponent

Information about a network path component.

Contents

ComponentId

The identifier of a component in the network path.

Type: String

Pattern: .*\S.*

Required: No

ComponentType

The type of component.

Type: String

Pattern: .*\S.*

Required: No

Egress

Information about the component that comes after the current component in the network path.

Type: NetworkHeader (p. 1083) object

Required: No

Ingress

Information about the component that comes before the current node in the network path.

Type: NetworkHeader (p. 1083) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NetworkPathComponentDetails

Information about the destination of the next component in the network path.

Contents

Address

The IP addresses of the destination.

Type: Array of strings

Pattern: .*\S.*

Required: No

PortRanges

A list of port ranges for the destination.

Type: Array of PortRange (p. 775) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Note

A user-defined note added to a finding.

Contents

Text

The text of a note.

Type: String

Pattern: .*

Required: Yes

UpdatedAt

The timestamp of when the note was updated.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: Yes

UpdatedBy

The principal that created a note.

Type: String

Pattern: .*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
NoteUpdate

The updated note.

Contents

Text

The updated note text.

Type: String

Pattern: .*

Required: Yes

UpdatedBy

The principal that updated the note.

Type: String

Pattern: .*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NumberFilter

A number filter for querying findings.

**Contents**

**Eq**

The equal-to condition to be applied to a single field when querying for findings.

Type: Double

Required: No

**Gte**

The greater-than-equal condition to be applied to a single field when querying for findings.

Type: Double

Required: No

**Lte**

The less-than-equal condition to be applied to a single field when querying for findings.

Type: Double

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Occurrences

The detected occurrences of sensitive data.

Contents

Cells

Occurrences of sensitive data detected in Microsoft Excel workbooks, comma-separated value (CSV) files, or tab-separated value (TSV) files.

Type: Array of Cell (p. 430) objects

Required: No

LineRanges

Occurrences of sensitive data detected in a non-binary text file or a Microsoft Word file. Non-binary text files include files such as HTML, XML, JSON, and TXT files.

Type: Array of Range (p. 490) objects

Required: No

OffsetRanges

Occurrences of sensitive data detected in a binary text file.

Type: Array of Range (p. 490) objects

Required: No

Pages

Occurrences of sensitive data in an Adobe Portable Document Format (PDF) file.

Type: Array of Page (p. 481) objects

Required: No

Records

Occurrences of sensitive data in an Apache Avro object container or an Apache Parquet file.

Type: Array of Record (p. 492) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Page


Contents

LineRange

An occurrence of sensitive data detected in a non-binary text file or a Microsoft Word file. Non-binary text files include files such as HTML, XML, JSON, and TXT files.

Type: Range (p. 490) object

Required: No

OffsetRange

An occurrence of sensitive data detected in a binary text file.

Type: Range (p. 490) object

Required: No

PageNumber

The page number of the page that contains the sensitive data.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PatchSummary

Provides an overview of the patch compliance status for an instance against a selected compliance standard.

Contents

Id

The identifier of the compliance standard that was used to determine the patch compliance status.

Type: String

Pattern: .*

Required: Yes

FailedCount

The number of patches from the compliance standard that failed to install.

Type: Integer

Required: No

InstalledCount

The number of patches from the compliance standard that were installed successfully.

Type: Integer

Required: No

InstalledOtherCount

The number of installed patches that are not part of the compliance standard.

Type: Integer

Required: No

InstalledPendingReboot

The number of patches that were applied, but that require the instance to be rebooted in order to be marked as installed.

Type: Integer

Required: No

InstalledRejectedCount

The number of patches that are installed but are also on a list of patches that the customer rejected.

Type: Integer

Required: No

MissingCount

The number of patches that are part of the compliance standard but are not installed. The count includes patches that failed to install.

Type: Integer
Required: No

**Operation**

The type of patch operation performed. For Patch Manager, the values are SCAN and INSTALL.

Type: String

Pattern: .*\S.*

Required: No

**OperationEndTime**

Indicates when the operation completed.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**OperationStartTime**

Indicates when the operation started.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**RebootOption**

The reboot option specified for the instance.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PortProbeAction

Provided if ActionType is PORT_PROBE. It provides details about the attempted port probe that was detected.

Contents

Blocked

Indicates whether the port probe was blocked.

Type: Boolean

Required: No

PortProbeDetails

Information about the ports affected by the port probe.

Type: Array of PortProbeDetail (p. 485) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PortProbeDetail

A port scan that was part of the port probe. For each scan, PortProbeDetails provides information about the local IP address and port that were scanned, and the remote IP address that the scan originated from.

Contents

LocalIpDetails

Provides information about the IP address where the scanned port is located.

Type: ActionLocalIpDetails (p. 379) object

Required: No

LocalPortDetails

Provides information about the port that was scanned.

Type: ActionLocalPortDetails (p. 380) object

Required: No

RemoteIpDetails

Provides information about the remote IP address that performed the scan.

Type: ActionRemoteIpDetails (p. 381) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ProcessDetails

The details of process-related information about a finding.

Contents

**LaunchedAt**

Indicates when the process was launched.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

**Name**

The name of the process.

Type: String
Pattern: .*\S.*
Required: No

**ParentPid**

The parent process ID. This field accepts positive integers between 0 and 2147483647.

Type: Integer
Required: No

**Path**

The path to the process executable.

Type: String
Pattern: .*\S.*
Required: No

**Pid**

The process ID.

Type: Integer
Required: No

**TerminatedAt**

Indicates when the process was terminated.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.
Type: String
Pattern: . *\$ . *
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Product

Contains details about a product.

Contents

ProductArn

The ARN assigned to the product.

Type: String

Pattern: .*\S.*

Required: Yes

ActivationUrl

The URL to the service or product documentation about the integration with Security Hub, including how to activate the integration.

Type: String

Pattern: .*\S.*

Required: No

Categories

The categories assigned to the product.

Type: Array of strings

Pattern: .*\S.*

Required: No

CompanyName

The name of the company that provides the product.

Type: String

Pattern: .*\S.*

Required: No

Description

A description of the product.

Type: String

Pattern: .*\S.*

Required: No

IntegrationTypes

The types of integration that the product supports. Available values are the following.

- SEND_FINDINGS_TO_SECURITY_HUB - The integration sends findings to Security Hub.
- RECEIVE_FINDINGS_FROM_SECURITY_HUB - The integration receives findings from Security Hub.
UPDATE_FINDINGS_IN_SECURITY_HUB - The integration does not send new findings to Security Hub, but does make updates to the findings that it receives from Security Hub.

Type: Array of strings

Valid Values: SEND_FINDINGS_TO_SECURITY_HUB | RECEIVE_FINDINGS_FROM_SECURITY_HUB | UPDATE_FINDINGS_IN_SECURITY_HUB

Required: No

MarketplaceUrl

For integrations with AWS services, the AWS Console URL from which to activate the service.

For integrations with third-party products, the AWS Marketplace URL from which to subscribe to or purchase the product.

Type: String

Pattern: .*\S.*

Required: No

ProductName

The name of the product.

Type: String

Pattern: .*\S.*

Required: No

ProductSubscriptionResourcePolicy

The resource policy associated with the product.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Range

Identifies where the sensitive data begins and ends.

Contents

End

The number of lines (for a line range) or characters (for an offset range) from the beginning of the file to the end of the sensitive data.

Type: Long

Required: No

Start

The number of lines (for a line range) or characters (for an offset range) from the beginning of the file to the end of the sensitive data.

Type: Long

Required: No

StartColumn

In the line where the sensitive data starts, the column within the line where the sensitive data starts.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Recommendation

A recommendation on how to remediate the issue identified in a finding.

Contents

Text

Describes the recommended steps to take to remediate an issue identified in a finding.

Type: String
Pattern: .*\S.*
Required: No

Url

A URL to a page or site that contains information about how to remediate a finding.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Record

An occurrence of sensitive data in an Apache Avro object container or an Apache Parquet file.

Contents

JsonPath

The path, as a JSONPath expression, to the field in the record that contains the data. If the field name is longer than 20 characters, it is truncated. If the path is longer than 250 characters, it is truncated.

Type: String
Pattern: .\*\S\.*
Required: No

RecordIndex

The record index, starting from 0, for the record that contains the data.

Type: Long
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RelatedFinding

Details about a related finding.

Contents

Id

The product-generated identifier for a related finding.

Type: String

Pattern: .*\S.*

Required: Yes

ProductArn

The ARN of the product that generated a related finding.

Type: String

Pattern: .*\S.*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Remediation

Details about the remediation steps for a finding.

Contents

Recommendation

A recommendation on the steps to take to remediate the issue identified by a finding.

Type: Recommendation (p. 491) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**Resource**

A resource related to a finding.

**Contents**

**Id**

The canonical identifier for the given resource type.

Type: String

Pattern: .*\S.*

Required: Yes

**Type**

The type of the resource that details are provided for. If possible, set Type to one of the supported resource types. For example, if the resource is an EC2 instance, then set Type to AwsEc2Instance.

If the resource does not match any of the provided types, then set Type to Other.

Type: String

Pattern: .*\S.*

Required: Yes

**DataClassification**

Contains information about sensitive data that was detected on the resource.

Type: [DataClassificationDetails](p. 442) object

Required: No

**Details**

Additional details about the resource related to a finding.

Type: [ResourceDetails](p. 497) object

Required: No

**Partition**

The canonical AWS partition name that the Region is assigned to.

Type: String

Valid Values: aws | aws-cn | aws-us-gov

Required: No

**Region**

The canonical AWS external Region name where this resource is located.

Type: String

Pattern: .*\S.*

Required: No
ResourceRole

Identifies the role of the resource in the finding. A resource is either the actor or target of the finding activity.

Type: String
Pattern: .*\S.*
Required: No

Tags

A list of AWS tags associated with a resource at the time the finding was processed.

Type: String to string map
Key Pattern: .*\S.*
Value Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResourceDetails

Additional details about a resource related to a finding.

To provide the details, use the object that corresponds to the resource type. For example, if the resource type is `AwsEc2Instance`, then you use the `AwsEc2Instance` object to provide the details.

If the type-specific object does not contain all of the fields you want to populate, then you use the `Other` object to populate those additional fields.

You also use the `Other` object to populate the details when the selected type does not have a corresponding object.

Contents

**AwsAmazonMqBroker**

Provides details about AWS AppSync message broker. A message broker allows software applications and components to communicate using various programming languages, operating systems, and formal messaging protocols.

Type: `AwsAmazonMqBrokerDetails (p. 570)` object

Required: No

**AwsApiGatewayRestApi**

Provides information about a REST API in version 1 of Amazon API Gateway.

Type: `AwsApiGatewayRestApiDetails (p. 586)` object

Required: No

**AwsApiGatewayStage**

Provides information about a version 1 Amazon API Gateway stage.

Type: `AwsApiGatewayStageDetails (p. 588)` object

Required: No

**AwsApiGatewayV2Api**

Provides information about a version 2 API in Amazon API Gateway.

Type: `AwsApiGatewayV2ApiDetails (p. 591)` object

Required: No

**AwsApiGatewayV2Stage**

Provides information about a version 2 stage for Amazon API Gateway.

Type: `AwsApiGatewayV2StageDetails (p. 595)` object

Required: No

**AwsAppSyncGraphQlApi**

Provides details about an AWS AppSync Graph QL API, which lets you query multiple databases, microservices, and APIs from a single GraphQL endpoint.

Type: `AwsAppSyncGraphQlApiDetails (p. 600)` object
Required: No

**AwsAthenaWorkGroup**

Provides information about an Amazon Athena workgroup. A workgroup helps you separate users, teams, applications, or workloads. It also helps you set limits on data processing and track costs.

Type: *AwsAthenaWorkGroupDetails (p. 611)* object

Required: No

**AwsAutoScalingAutoScalingGroup**

Details for an autoscaling group.

Type: *AwsAutoScalingAutoScalingGroupDetails (p. 836)* object

Required: No

**AwsAutoScalingLaunchConfiguration**

Provides details about a launch configuration.

Type: *AwsAutoScalingLaunchConfigurationDetails (p. 848)* object

Required: No

**AwsBackupBackupPlan**

Provides details about an AWS Backup backup plan.

Type: *AwsBackupBackupPlanDetails (p. 615)* object

Required: No

**AwsBackupBackupVault**

Provides details about an AWS Backup backup vault.

Type: *AwsBackupBackupVaultDetails (p. 620)* object

Required: No

**AwsBackupRecoveryPoint**

Provides details about an AWS Backup backup, or recovery point.

Type: *AwsBackupRecoveryPointDetails (p. 625)* object

Required: No

**AwsCertificateManagerCertificate**

Provides details about an AWS Certificate Manager certificate.

Type: *AwsCertificateManagerCertificateDetails (p. 630)* object

Required: No

**AwsCloudFormationStack**

Details about an AWS CloudFormation stack. A stack is a collection of AWS resources that you can manage as a single unit.

Type: *AwsCloudFormationStackDetails (p. 643)* object

Required: No
**AwsCloudFrontDistribution**

Details about a CloudFront distribution.

Type: `AwsCloudFrontDistributionDetails (p. 652)` object

Required: No

**AwsCloudTrailTrail**

Provides details about a CloudTrail trail.

Type: `AwsCloudTrailTrailDetails (p. 669)` object

Required: No

**AwsCloudWatchAlarm**

Details about an Amazon CloudWatch alarm. An alarm allows you to monitor and receive alerts about your AWS resources and applications across multiple Regions.

Type: `AwsCloudWatchAlarmDetails (p. 672)` object

Required: No

**AwsCodeBuildProject**

Details for an AWS CodeBuild project.

Type: `AwsCodeBuildProjectDetails (p. 679)` object

Required: No

**AwsDynamoDbTable**

Details about a DynamoDB table.

Type: `AwsDynamoDbTableDetails (p. 694)` object

Required: No

**AwsEc2Eip**

Details about an Elastic IP address.

Type: `AwsEc2EipDetails (p. 713)` object

Required: No

**AwsEc2Instance**

Details about an EC2 instance related to a finding.

Type: `AwsEc2InstanceDetails (p. 715)` object

Required: No

**AwsEc2LaunchTemplate**

Specifies the properties for creating an Amazon Elastic Compute Cloud (Amazon EC2) launch template.

Type: `AwsEc2LaunchTemplateDetails (p. 769)` object

Required: No
AwsEc2NetworkAcl
Details about an EC2 network access control list (ACL).
Type: AwsEc2NetworkAclDetails (p. 771) object
Required: No

AwsEc2NetworkInterface
Details for an EC2 network interface.
Type: AwsEc2NetworkInterfaceDetails (p. 779) object
Required: No

AwsEc2RouteTable
Provides details about a route table. A route table contains a set of rules, called routes, that determine where to direct network traffic from your subnet or gateway.
Type: AwsEc2RouteTableDetails (p. 784) object
Required: No

AwsEc2SecurityGroup
Details for an EC2 security group.
Type: AwsEc2SecurityGroupDetails (p. 793) object
Required: No

AwsEc2Subnet
Details about a subnet in Amazon EC2.
Type: AwsEc2SubnetDetails (p. 802) object
Required: No

AwsEc2TransitGateway
Details about an Amazon EC2 transit gateway that interconnects your virtual private clouds (VPC) and on-premises networks.
Type: AwsEc2TransitGatewayDetails (p. 807) object
Required: No

AwsEc2Volume
Details for an Amazon EC2 volume.
Type: AwsEc2VolumeDetails (p. 811) object
Required: No

AwsEc2Vpc
Details for an Amazon EC2 VPC.
Type: AwsEc2VpcDetails (p. 814) object
Required: No
**AwsEc2VpcEndpointService**

Details about the service configuration for a VPC endpoint service.

Type: `AwsEc2VpcEndpointServiceDetails (p. 816)` object

Required: No

**AwsEc2VpcPeeringConnection**

Details about an Amazon EC2 VPC peering connection. A VPC peering connection is a networking connection between two VPCs that enables you to route traffic between them privately.

Type: `AwsEc2VpcPeeringConnectionDetails (p. 819)` object

Required: No

**AwsEc2VpnConnection**

Details about an Amazon EC2 VPN connection.

Type: `AwsEc2VpnConnectionDetails (p. 826)` object

Required: No

**AwsEcrContainerImage**

Information about an Amazon ECR image.

Type: `AwsEcrContainerImageDetails (p. 854)` object

Required: No

**AwsEcrRepository**

Information about an Amazon Elastic Container Registry repository.

Type: `AwsEcrRepositoryDetails (p. 856)` object

Required: No

**AwsEcsCluster**

Details about an Amazon ECS cluster.

Type: `AwsEcsClusterDetails (p. 866)` object

Required: No

**AwsEcsContainer**

Provides information about a Docker container that's part of a task.

Type: `AwsEcsContainerDetails (p. 868)` object

Required: No

**AwsEcsService**

Details about a service within an ECS cluster.

Type: `AwsEcsServiceDetails (p. 873)` object

Required: No

**AwsEcsTask**

Details about a task in a cluster.
Type: `AwsEcsTaskDefinitionDetails (p. 914)` object

Required: No

**AwsEcsTaskDefinition**

Details about a task definition. A task definition describes the container and volume definitions of an Amazon Elastic Container Service task.

Type: `AwsEcsTaskDefinitionDetails (p. 914)` object

Required: No

**AwsEfsAccessPoint**

Details about an Amazon EFS access point. An access point is an application-specific view into an EFS file system that applies an operating system user and group, and a file system path, to any file system request made through the access point.

Type: `AwsEfsAccessPointDetails (p. 933)` object

Required: No

**AwsEksCluster**

Details about an Amazon EKS cluster.

Type: `AwsEksClusterDetails (p. 938)` object

Required: No

**AwsElasticBeanstalkEnvironment**

Details about an Elastic Beanstalk environment.

Type: `AwsElasticBeanstalkEnvironmentDetails (p. 943)` object

Required: No

**AwsElasticsearchDomain**

Details for an Elasticsearch domain.

Type: `AwsElasticsearchDomainDetails (p. 950)` object

Required: No

**AwsElbLoadBalancer**

Contains details about a Classic Load Balancer.

Type: `AwsElbLoadBalancerDetails (p. 975)` object

Required: No

**AwsElbv2LoadBalancer**

Details about a load balancer.

Type: `AwsElbv2LoadBalancerDetails (p. 987)` object

Required: No

**AwsEventSchemasRegistry**

A schema defines the structure of events that are sent to Amazon EventBridge. Schema registries are containers for schemas. They collect and organize schemas so that your schemas are in logical groups.
Type: **AwsEventSchemasRegistryDetails (p. 990)** object

Required: No

**AwsGuardDutyDetector**

Provides details about an Amazon GuardDuty detector. A detector is an object that represents the GuardDuty service. A detector is required for GuardDuty to become operational.

Type: **AwsGuardDutyDetectorDetails (p. 992)** object

Required: No

**AwsIamAccessKey**

Details about an IAM access key related to a finding.

Type: **AwsIamAccessKeyDetails (p. 1006)** object

Required: No

**AwsIamGroup**

Contains details about an IAM group.

Type: **AwsIamGroupDetails (p. 1013)** object

Required: No

**AwsIamPolicy**

Details about an IAM permissions policy.

Type: **AwsIamPolicyDetails (p. 1021)** object

Required: No

**AwsIamRole**

Details about an IAM role.

Type: **AwsIamRoleDetails (p. 1024)** object

Required: No

**AwsIamUser**

Details about an IAM user.

Type: **AwsIamUserDetails (p. 1027)** object

Required: No

**AwsKinesisStream**

Details about an Amazon Kinesis data stream.

Type: **AwsKinesisStreamDetails (p. 1030)** object

Required: No

**AwsKmsKey**

Details about an AWS KMS key.

Type: **AwsKmsKeyDetails (p. 1033)** object

Required: No
**AwsLambdaFunction**

Details about a Lambda function.

Type: [AwsLambdaFunctionDetails](p. 1036) object

Required: No

**AwsLambdaLayerVersion**

Details for a Lambda layer version.

Type: [AwsLambdaLayerVersionDetails](p. 1047) object

Required: No

**AwsNetworkFirewallFirewall**

Details about an AWS Network Firewall firewall.

Type: [AwsNetworkFirewallFirewallDetails](p. 1049) object

Required: No

**AwsNetworkFirewallFirewallPolicy**

Details about an AWS Network Firewall firewall policy.

Type: [AwsNetworkFirewallFirewallPolicyDetails](p. 1051) object

Required: No

**AwsNetworkFirewallRuleGroup**

Details about an AWS Network Firewall rule group.

Type: [AwsNetworkFirewallRuleGroupDetails](p. 1060) object

Required: No

**AwsOpenSearchServiceDomain**

Details about an Amazon OpenSearch Service domain.

Type: [AwsOpenSearchServiceDomainDetails](p. 1090) object

Required: No

**AwsRdsDbCluster**

Details about an Amazon RDS database cluster.

Type: [AwsRdsDbClusterDetails](p. 1104) object

Required: No

**AwsRdsDbClusterSnapshot**

Details about an Amazon RDS database cluster snapshot.

Type: [AwsRdsDbClusterSnapshotDetails](p. 1113) object

Required: No

**AwsRdsDbInstance**

Details about an Amazon RDS database instance.
Type: AwsRdsDbInstanceDetails (p. 1119) object

Required: No

**AwsRdsDbSecurityGroup**

Details about an Amazon RDS DB security group.

Type: AwsRdsDbSecurityGroupDetails (p. 1136) object

Required: No

**AwsRdsDbSnapshot**

Details about an Amazon RDS database snapshot.

Type: AwsRdsDbSnapshotDetails (p. 1140) object

Required: No

**AwsRdsEventSubscription**

Details about an RDS event notification subscription.

Type: AwsRdsEventSubscriptionDetails (p. 1150) object

Required: No

**AwsRedshiftCluster**

Contains details about an Amazon Redshift cluster.

Type: AwsRedshiftClusterDetails (p. 1160) object

Required: No

**AwsS3AccountPublicAccessBlock**

Details about the Amazon S3 Public Access Block configuration for an account.

Type: AwsS3AccountPublicAccessBlockDetails (p. 1180) object

Required: No

**AwsS3Bucket**

Details about an S3 bucket related to a finding.

Type: AwsS3BucketDetails (p. 1193) object

Required: No

**AwsS3Object**

Details about an S3 object related to a finding.

Type: AwsS3ObjectDetails (p. 1214) object

Required: No

**AwsSageMakerNotebookInstance**

Provides details about an Amazon SageMaker notebook instance.

Type: AwsSageMakerNotebookInstanceDetails (p. 1216) object

Required: No
**AwsSecretsManagerSecret**

Details about a Secrets Manager secret.

Type: *AwsSecretsManagerSecretDetails (p. 1221)* object

Required: No

**AwsSnsTopic**

Details about an SNS topic.

Type: *AwsSnsTopicDetails (p. 1224)* object

Required: No

**AwsSqsQueue**

Details about an SQS queue.

Type: *AwsSqsQueueDetails (p. 1228)* object

Required: No

**AwsSsmPatchCompliance**

Provides information about the state of a patch on an instance based on the patch baseline that was used to patch the instance.

Type: *AwsSsmPatchComplianceDetails (p. 1234)* object

Required: No

**AwsStepFunctionStateMachine**

Provides details about an AWS Step Functions state machine, which is a workflow consisting of a series of event-driven steps.

Type: *AwsStepFunctionStateMachineDetails (p. 1235)* object

Required: No

**AwsWafRateBasedRule**

Details about a rate-based rule for global resources.

Type: *AwsWafRateBasedRuleDetails (p. 1242)* object

Required: No

**AwsWafRegionalRateBasedRule**

Details about a rate-based rule for Regional resources.

Type: *AwsWafRegionalRateBasedRuleDetails (p. 1245)* object

Required: No

**AwsWafRegionalRule**

Details about an AWS WAF rule for Regional resources.

Type: *AwsWafRegionalRuleDetails (p. 1248)* object

Required: No
**AwsWafRegionalRuleGroup**

Details about an AWS WAF rule group for Regional resources.

Type: [AwsWafRegionalRuleGroupDetails](p. 1249) object

Required: No

**AwsWafRegionalWebAcl**

Details about an AWS WAF web access control list (web ACL) for Regional resources.

Type: [AwsWafRegionalWebAclDetails](p. 1253) object

Required: No

**AwsWafRule**

Details about an AWS WAF rule for global resources.

Type: [AwsWafRuleDetails](p. 1259) object

Required: No

**AwsWafRuleGroup**

Details about an AWS WAF rule group for global resources.

Type: [AwsWafRuleGroupDetails](p. 1260) object

Required: No

**AwsWafv2RuleGroup**

Details about an AWS WAFv2 rule group.

Type: [AwsWafv2RuleGroupDetails](p. 1269) object

Required: No

**AwsWafv2WebAcl**

Details about an AWS WAFv2 web Access Control List (ACL).

Type: [AwsWafv2WebAclDetails](p. 1280) object

Required: No

**AwsWafWebAcl**

Details for an AWS WAF web ACL.

Type: [AwsWafWebAclDetails](p. 1282) object

Required: No

**AwsXrayEncryptionConfig**

Information about the encryption configuration for AWS X-Ray.

Type: [AwsXrayEncryptionConfigDetails](p. 1288) object

Required: No

**Container**

Details about a container resource related to a finding.
Type: ContainerDetails (p. 1289) object

Required: No

Other

Details about a resource that are not available in a type-specific details object. Use the Other object in the following cases.

- The type-specific object does not contain all of the fields that you want to populate. In this case, first use the type-specific object to populate those fields. Use the Other object to populate the fields that are missing from the type-specific object.
- The resource type does not have a corresponding object. This includes resources for which the type is Other.

Type: String to string map

Key Pattern: . *\S . *

Value Pattern: . *\S . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Result
Details about the account that was not processed.

Contents

AccountId
An AWS account ID of the account that was not processed.
Type: String
Required: No

ProcessingResult
The reason that the account was not processed.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
SecurityControl

A security control in Security Hub describes a security best practice related to a specific resource.

Contents

Description

The description of a security control across standards. This typically summarizes how Security Hub evaluates the control and the conditions under which it produces a failed finding. This parameter doesn't reference a specific standard.

Type: String

Pattern: .*

Required: Yes

RemediationUrl

A link to Security Hub documentation that explains how to remediate a failed finding for a security control.

Type: String

Pattern: .*

Required: Yes

SecurityControlArn

The Amazon Resource Name (ARN) for a security control across standards, such as arn:aws:securityhub:eu-central-1:123456789012:security-control/S3.1. This parameter doesn't mention a specific standard.

Type: String

Pattern: .*

Required: Yes

SecurityControlId

The unique identifier of a security control across standards. Values for this field typically consist of an AWS service name and a number, such as APIGateway.3.

Type: String

Pattern: .*

Required: Yes

SecurityControlStatus

The enablement status of a security control in a specific standard.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes
SeverityRating

The severity of a security control. For more information about how Security Hub determines control severity, see Assigning severity to control findings in the Security Hub User Guide.

Type: String

Valid Values: LOW | MEDIUM | HIGH | CRITICAL

Required: Yes

Title

The title of a security control.

Type: String

Pattern: .\S.*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SecurityControlDefinition

Provides metadata for a security control, including its unique standard-agnostic identifier, title, description, severity, availability in AWS Regions, and a link to remediation steps.

Contents

CurrentRegionAvailability

Specifies whether a security control is available in the current AWS Region.

Type: String

Valid Values: AVAILABLE | UNAVAILABLE

Required: Yes

Description

The description of a security control across standards. This typically summarizes how Security Hub evaluates the control and the conditions under which it produces a failed finding. This parameter doesn't reference a specific standard.

Type: String

Pattern: .\S.*

Required: Yes

RemediationUrl

A link to Security Hub documentation that explains how to remediate a failed finding for a security control.

Type: String

Pattern: .\S.*

Required: Yes

SecurityControlId

The unique identifier of a security control across standards. Values for this field typically consist of an AWS service name and a number (for example, APIGateway.3). This parameter differs from SecurityControlArn, which is a unique Amazon Resource Name (ARN) assigned to a control. The ARN references the security control ID (for example, arn:aws:securityhub:eu-central-1:123456789012:security-control/APIGateway.3).

Type: String

Pattern: .\S.*

Required: Yes

SeverityRating

The severity of a security control. For more information about how Security Hub determines control severity, see Assigning severity to control findings in the Security Hub User Guide.

Type: String

Valid Values: LOW | MEDIUM | HIGH | CRITICAL
Required: Yes

**Title**

The title of a security control.

Type: String

Pattern: .*\S.*

Required: Yes

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
SensitiveDataDetections

The list of detected instances of sensitive data.

Contents

Count

The total number of occurrences of sensitive data that were detected.

Type: Long

Required: No

Occurrences

Details about the sensitive data that was detected.

Type: Occurrences (p. 480) object

Required: No

Type

The type of sensitive data that was detected. For example, the type might indicate that the data is an email address.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SensitiveDataResult

Contains a detected instance of sensitive data that are based on built-in identifiers.

Contents

Category

The category of sensitive data that was detected. For example, the category can indicate that the sensitive data involved credentials, financial information, or personal information.

Type: String

Pattern: .*\S.*

Required: No

Detections

The list of detected instances of sensitive data.

Type: Array of SensitiveDataDetections (p. 514) objects

Required: No

TotalCount

The total number of occurrences of sensitive data.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Severity

The severity of the finding.

The finding provider can provide the initial severity. The finding provider can only update the severity if it hasn't been updated using BatchUpdateFindings.

The finding must have either Label or Normalized populated. If only one of these attributes is populated, then Security Hub automatically populates the other one. If neither attribute is populated, then the finding is invalid. Label is the preferred attribute.

Contents

Label

The severity value of the finding. The allowed values are the following.

- INFORMATIONAL - No issue was found.
- LOW - The issue does not require action on its own.
- MEDIUM - The issue must be addressed but not urgently.
- HIGH - The issue must be addressed as a priority.
- CRITICAL - The issue must be remediated immediately to avoid it escalating.

If you provide Normalized and do not provide Label, then Label is set automatically as follows.

- 0 - INFORMATIONAL
- 1–39 - LOW
- 40–69 - MEDIUM
- 70–89 - HIGH
- 90–100 - CRITICAL

Type: String

Valid Values: INFORMATIONAL | LOW | MEDIUM | HIGH | CRITICAL

Required: No

Normalized

Deprecated. The normalized severity of a finding. This attribute is being deprecated. Instead of providing Normalized, provide Label.

If you provide Label and do not provide Normalized, then Normalized is set automatically as follows.

- INFORMATIONAL - 0
- LOW - 1
- MEDIUM - 40
- HIGH - 70
- CRITICAL - 90

Type: Integer

Required: No

Original

The native severity from the finding product that generated the finding.
Severity

Type: String
Pattern: .*\S.*
Required: No

Product

Deprecated. This attribute is being deprecated. Instead of providing Product, provide Original.

The native severity as defined by the AWS service or integrated partner product that generated the finding.

Type: Double
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SeverityUpdate

Updates to the severity information for a finding.

Contents

Label

The severity value of the finding. The allowed values are the following.

- INFORMATIONAL - No issue was found.
- LOW - The issue does not require action on its own.
- MEDIUM - The issue must be addressed but not urgently.
- HIGH - The issue must be addressed as a priority.
- CRITICAL - The issue must be remediated immediately to avoid it escalating.

Type: String

Valid Values: INFORMATIONAL | LOW | MEDIUM | HIGH | CRITICAL

Required: No

Normalized

The normalized severity for the finding. This attribute is to be deprecated in favor of Label.

If you provide Normalized and do not provide Label, Label is set automatically as follows.

- 0 - INFORMATIONAL
- 1–39 - LOW
- 40–69 - MEDIUM
- 70–89 - HIGH
- 90–100 - CRITICAL

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

Product

The native severity as defined by the AWS service or integrated partner product that generated the finding.

Type: Double

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SoftwarePackage

Information about a software package.

Contents

**Architecture**

The architecture used for the software package.

Type: String

Pattern: .*

Required: No

**Epoch**

The epoch of the software package.

Type: String

Pattern: .*

Required: No

**FilePath**

The file system path to the package manager inventory file.

Type: String

Pattern: .*

Required: No

**FixedInVersion**

The version of the software package in which the vulnerability has been resolved.

Type: String

Pattern: .*

Required: No

**Name**

The name of the software package.

Type: String

Pattern: .*

Required: No

**PackageManager**

The source of the package.

Type: String

Pattern: .*


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SoftwarePackage

Required: No

**Release**

The release of the software package.

Type: String

Pattern: .*

Required: No

**Remediation**

Describes the actions a customer can take to resolve the vulnerability in the software package.

Type: String

Pattern: .*

Required: No

**SourceLayerArn**

The Amazon Resource Name (ARN) of the source layer.

Type: String

Pattern: .*

Required: No

**SourceLayerHash**

The source layer hash of the vulnerable package.

Type: String

Pattern: .*

Required: No

**Version**

The version of the software package.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
SortCriterion

A collection of finding attributes used to sort findings.

Contents

Field

The finding attribute used to sort findings.

Type: String

Pattern: .*\S.*

Required: No

SortOrder

The order used to sort findings.

Type: String

Valid Values: asc | desc

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Standard

Provides information about a specific security standard.

Contents

Description

A description of the standard.

Type: String

Pattern: .*\S.*

Required: No

EnabledByDefault

Whether the standard is enabled by default. When Security Hub is enabled from the console, if a standard is enabled by default, the check box for that standard is selected by default.

When Security Hub is enabled using the EnableSecurityHub API operation, the standard is enabled by default unless EnableDefaultStandards is set to false.

Type: Boolean

Required: No

Name

The name of the standard.

Type: String

Pattern: .*\S.*

Required: No

StandardsArn

The ARN of a standard.

Type: String

Pattern: .*\S.*

Required: No

StandardsManagedBy

Provides details about the management of a standard.

Type: StandardsManagedBy (p. 533) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
StandardsControl

Details for an individual security standard control.

Contents

ControlId

The identifier of the security standard control.

Type: String
Pattern: .*\S.*
Required: No

ControlStatus

The current status of the security standard control. Indicates whether the control is enabled or disabled. Security Hub does not check against disabled controls.

Type: String
Valid Values: ENABLED | DISABLED
Required: No

ControlStatusUpdatedAt

The date and time that the status of the security standard control was most recently updated.

Type: Timestamp
Required: No

Description

The longer description of the security standard control. Provides information about what the control is checking for.

Type: String
Pattern: .*\S.*
Required: No

DisabledReason

The reason provided for the most recent change in status for the control.

Type: String
Pattern: .*\S.*
Required: No

RelatedRequirements

The list of requirements that are related to this control.

Type: Array of strings
Pattern: .*\S.*


**Required**: No

**RemediationUrl**

A link to remediation information for the control in the Security Hub user documentation.

Type: String

Pattern: .\S.*

Required: No

**SeverityRating**

The severity of findings generated from this security standard control.

The finding severity is based on an assessment of how easy it would be to compromise AWS resources if the issue is detected.

Type: String

Valid Values: LOW | MEDIUM | HIGH | CRITICAL

Required: No

**StandardsControlArn**

The ARN of the security standard control.

Type: String

Pattern: .\S.*

Required: No

**Title**

The title of the security standard control.

Type: String

Pattern: .\S.*

Required: No

---

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
StandardsControlAssociationDetail

Provides details about a control's enablement status in a specified standard.

Contents

AssociationStatus

Specifies whether a control is enabled or disabled in a specified standard.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

SecurityControlArn

The ARN of a security control across standards, such as arn:aws:securityhub:eu-central-1:123456789012:security-control/S3.1. This parameter doesn't mention a specific standard.

Type: String

Pattern: .*\S.*

Required: Yes

SecurityControlId

The unique identifier of a security control across standards. Values for this field typically consist of an AWS service name and a number, such as APIGateway.3.

Type: String

Pattern: .*\S.*

Required: Yes

StandardsArn

The Amazon Resource Name (ARN) of a security standard.

Type: String

Pattern: .*\S.*

Required: Yes

RelatedRequirements

The requirement that underlies a control in the compliance framework related to the standard.

Type: Array of strings

Pattern: .*\S.*

Required: No

StandardsControlArns

Provides the input parameter that Security Hub uses to call the UpdateStandardsControl API. This API can be used to enable or disable a control in a specified standard.
StandardsControlAssociationDetail

Type: Array of strings

Pattern: .*

Required: No

StandardsControlDescription

The description of a control. This typically summarizes how Security Hub evaluates the control and the conditions under which it produces a failed finding. This parameter may reference a specific standard.

Type: String

Pattern: .*

Required: No

StandardsControlTitle

The title of a control. This field may reference a specific standard.

Type: String

Pattern: .*

Required: No

UpdatedAt

The time at which the enablement status of the control in the specified standard was last updated.

Type: Timestamp

Required: No

UpdatedReason

The reason for updating the enablement status of a control in a specified standard.

Type: String

Pattern: .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsControlAssociationId

An array with one or more objects that includes a security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) and the Amazon Resource Name (ARN) of a standard. The security control ID or ARN is the same across standards.

Contents

SecurityControlId

The unique identifier (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) of a security control across standards.

Type: String

Pattern: .*\S.*

Required: Yes

StandardsArn

The ARN of a standard.

Type: String

Pattern: .*\S.*

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsControlAssociationSummary

An array that provides the enablement status and other details for each control that applies to each enabled standard.

Contents

**AssociationStatus**

The enablement status of a control in a specific standard.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

**SecurityControlArn**

The ARN of a control, such as `arn:aws:securityhub:eu-central-1:123456789012:security-control/S3.1`. This parameter doesn't mention a specific standard.

Type: String

Pattern: .*

Required: Yes

**SecurityControlId**

A unique standard-agnostic identifier for a control. Values for this field typically consist of an AWS service and a number, such as `APIGateway.5`. This field doesn't reference a specific standard.

Type: String

Pattern: .*

Required: Yes

**StandardsArn**

The Amazon Resource Name (ARN) of a standard.

Type: String

Pattern: .*

Required: Yes

**RelatedRequirements**

The requirement that underlies this control in the compliance framework related to the standard.

Type: Array of strings

Pattern: .*

Required: No

**StandardsControlDescription**

The description of a control. This typically summarizes how Security Hub evaluates the control and the conditions under which it produces a failed finding. The parameter may reference a specific standard.
Type: String
Pattern: .\S.*
Required: No

**StandardsControlTitle**

The title of a control.

Type: String
Pattern: .\S.*
Required: No

**UpdatedAt**

The last time that a control's enablement status in a specified standard was updated.

Type: Timestamp
Required: No

**UpdatedReason**

The reason for updating the control's enablement status in a specified standard.

Type: String
Pattern: .\S.*
Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
StandardsControlAssociationUpdate

An array of requested updates to the enablement status of controls in specified standards. The objects in the array include a security control ID, the Amazon Resource Name (ARN) of the standard, the requested enablement status, and the reason for updating the enablement status.

Contents

AssociationStatus

The desired enablement status of the control in the standard.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

SecurityControlId

The unique identifier for the security control whose enablement status you want to update.

Type: String

Pattern: .\S.*

Required: Yes

StandardsArn

The Amazon Resource Name (ARN) of the standard in which you want to update the control's enablement status.

Type: String

Pattern: .\S.*

Required: Yes

UpdatedReason

The reason for updating the control's enablement status in the standard.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsManagedBy

Provides details about the management of a security standard.

Contents

Company

An identifier for the company that manages a specific security standard. For existing standards, the value is equal to AWS.

Type: String
Pattern: .*\S.*
Required: No

Product

An identifier for the product that manages a specific security standard. For existing standards, the value is equal to the AWS service that manages the standard.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsStatusReason

The reason for the current status of a standard subscription.

Contents

StatusReasonCode

The reason code that represents the reason for the current status of a standard subscription.

Type: String

Valid Values: NO_AVAILABLE_CONFIGURATION_RECORDER | INTERNAL_ERROR

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsSubscription

A resource that represents your subscription to a supported standard.

Contents

StandardsArn

The ARN of a standard.

Type: String

Pattern: .*\S.*

Required: Yes

StandardsInput

A key-value pair of input for the standard.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: Yes

StandardsStatus

The status of the standard subscription.

The status values are as follows:
- PENDING - Standard is in the process of being enabled.
- READY - Standard is enabled.
- INCOMPLETE - Standard could not be enabled completely. Some controls may not be available.
- DELETING - Standard is in the process of being disabled.
- FAILED - Standard could not be disabled.

Type: String

Valid Values: PENDING | READY | FAILED | DELETING | INCOMPLETE

Required: Yes

StandardsSubscriptionArn

The ARN of a resource that represents your subscription to a supported standard.

Type: String

Pattern: .*\S.*

Required: Yes

StandardsStatusReason

The reason for the current status.

Type: StandardsStatusReason (p. 534) object

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StandardsSubscriptionRequest

The standard that you want to enable.

Contents

StandardsArn

The ARN of the standard that you want to enable. To view the list of available standards and their ARNs, use the DescribeStandards operation.

Type: String

Pattern: .*\S.*

Required: Yes

StandardsInput

A key-value pair of input for the standard.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**StatusReason**

Provides additional context for the value of `Compliance.Status`.

**Contents**

**ReasonCode**

A code that represents a reason for the control status. For the list of status reason codes and their meanings, see [Standards-related information in the ASFF](https://aws.amazon.com/securityhub/userguide/) in the *AWS Security Hub User Guide*.

Type: String

Pattern: `.\S.*`

Required: Yes

**Description**

The corresponding description for the status reason code.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)
StringFilter

A string filter for filtering AWS Security Hub findings.

Contents

Comparison

The condition to apply to a string value when filtering Security Hub findings.

To search for values that have the filter value, use one of the following comparison operators:

- To search for values that include the filter value, use CONTAINS. For example, the filter Title CONTAINS CloudFront matches findings that have a Title that includes the string CloudFront.
- To search for values that exactly match the filter value, use EQUALS. For example, the filter AwsAccountId EQUALS 123456789012 only matches findings that have an account ID of 123456789012.
- To search for values that start with the filter value, use PREFIX. For example, the filter ResourceRegion PREFIX us matches findings that have a ResourceRegion that starts with us. A ResourceRegion that starts with a different value, such as af, ap, or ca, doesn't match.

CONTAINS, EQUALS, and PREFIX filters on the same field are joined by OR. A finding matches if it matches any one of those filters. For example, the filters Title CONTAINS CloudFront OR Title CONTAINS CloudWatch match a finding that includes either CloudFront, CloudWatch, or both strings in the title.

To search for values that don't have the filter value, use one of the following comparison operators:

- To search for values that exclude the filter value, use NOT_CONTAINS. For example, the filter Title NOT_CONTAINS CloudFront matches findings that have a Title that excludes the string CloudFront.
- To search for values other than the filter value, use NOT_EQUALS. For example, the filter AwsAccountId NOT_EQUALS 123456789012 only matches findings that have an account ID other than 123456789012.
- To search for values that don't start with the filter value, use PREFIX_NOT_EQUALS. For example, the filter ResourceRegion PREFIX_NOT_EQUALS us matches findings with a ResourceRegion that starts with a value other than us.

NOT_CONTAINS, NOT_EQUALS, and PREFIX_NOT_EQUALS filters on the same field are joined by AND. A finding matches only if it matches all of those filters. For example, the filters Title NOT_CONTAINS CloudFront AND Title NOT_CONTAINS CloudWatch match a finding that excludes both CloudFront and CloudWatch in the title.

You can't have both a CONTAINS filter and a NOT_CONTAINS filter on the same field. Similarly, you can't provide both an EQUALS filter and a NOT_EQUALS or PREFIX_NOT_EQUALS filter on the same field. Combining filters in this way returns an error. CONTAINS filters can only be used with other CONTAINS filters. NOT_CONTAINS filters can only be used with other NOT_CONTAINS filters.

You can combine PREFIX filters with NOT_EQUALS or PREFIX_NOT_EQUALS filters for the same field. Security Hub first processes the PREFIX filters, and then the NOT_EQUALS or PREFIX_NOT_EQUALS filters.

For example, for the following filters, Security Hub first identifies findings that have resource types that start with either AwsIam or AwsEc2. It then excludes findings that have a resource type of AwsIamPolicy and findings that have a resource type of AwsEc2NetworkInterface.

- ResourceType PREFIX AwsIam
- ResourceType PREFIX AwsEc2
StringFilter

- ResourceType NOT_EQUALS AwsIamPolicy
- ResourceType NOT_EQUALS AwsEc2NetworkInterface

CONTAINS and NOT_CONTAINS operators can be used only with automation rules. For more information, see Automation rules in the AWS Security Hub User Guide.

Type: String

Valid Values: EQUALS | PREFIX | NOT_EQUALS | PREFIX_NOT_EQUALS | CONTAINS | NOT_CONTAINS

Required: No

Value

The string filter value. Filter values are case sensitive. For example, the product name for control-based findings is Security Hub. If you provide security hub as the filter value, there's no match.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**Threat**

Provides information about the threat detected in a security finding and the file paths that were affected by the threat.

**Contents**

**FilePaths**

Provides information about the file paths that were affected by the threat.

Type: Array of `FilePaths (p. 446)` objects

Required: No

**ItemCount**

This total number of items in which the threat has been detected.

Type: Integer

Required: No

**Name**

The name of the threat.

Type: String

Pattern: `.*\S.*`

Required: No

**Severity**

The severity of the threat.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
ThreatIntelIndicator

Details about the threat intelligence related to a finding.

Contents

Category

The category of a threat intelligence indicator.

Type: String

Valid Values: BACKDOOR | CARD_STEALER | COMMAND_AND_CONTROL | DROP_SITE | EXPLOIT_SITE | KEYLOGGER

Required: No

LastObservedAt

Indicates when the most recent instance of a threat intelligence indicator was observed.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*'\S.*

Required: No

Source

The source of the threat intelligence indicator.

Type: String

Pattern: .*'\S.*

Required: No

SourceUrl

The URL to the page or site where you can get more information about the threat intelligence indicator.

Type: String

Pattern: .*'\S.*

Required: No

Type

The type of threat intelligence indicator.

Type: String

Valid Values: DOMAIN | EMAIL_ADDRESS | HASH_MD5 | HASH_SHA1 | HASH_SHA256 | HASH_SHA512 | IPV4_ADDRESS | IPV6_ADDRESS | MUTEX | PROCESS | URL

Required: No
Value

- The value of a threat intelligence indicator.
  
  - Type: String
  
  - Pattern: .\S.*
  
  - Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
UnprocessedAutomationRule

A list of objects containing RuleArn, ErrorCode, and ErrorMessage. This parameter tells you which automation rules the request didn't process and why.

Contents

ErrorCode

The error code associated with the unprocessed automation rule.

Type: Integer

Required: No

ErrorMessage

An error message describing why a request didn't process a specific rule.

Type: String

Pattern: .*\S.*

Required: No

RuleArn

The Amazon Resource Name (ARN) for the unprocessed automation rule.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
UnprocessedSecurityControl

Provides details about a security control for which a response couldn't be returned.

Contents

**ErrorCode**

The error code for the unprocessed security control.

Type: String

Valid Values: INVALID_INPUT | ACCESS_DENIED | NOT_FOUND | LIMIT_EXCEEDED

Required: Yes

**SecurityControlId**

The control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) for which a response couldn't be returned.

Type: String

Pattern: .*\S.*

Required: Yes

**ErrorReason**

The reason why the security control was unprocessed.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
UnprocessedStandardsControlAssociation

Provides details about which control's enablement status couldn't be retrieved in a specified standard when calling BatchUpdateStandardsControlAssociations. This parameter also provides details about why the request was unprocessed.

Contents

ErrorCode

The error code for the unprocessed standard and control association.

Type: String

Valid Values: INVALID_INPUT | ACCESS_DENIED | NOT_FOUND | LIMIT_EXCEEDED

Required: Yes

StandardsControlAssociationId

An array with one or more objects that includes a security control (identified with SecurityControlId, SecurityControlArn, or a mix of both parameters) and the Amazon Resource Name (ARN) of a standard. This parameter shows the specific controls for which the enablement status couldn't be retrieved in specified standards when calling BatchUpdateStandardsControlAssociations.

Type: StandardsControlAssociationId (p. 529) object

Required: Yes

ErrorReason

The reason why the standard and control association was unprocessed.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
UnprocessedStandardsControlAssociationUpdate

Provides details about which control's enablement status could not be updated in a specified standard when calling the BatchUpdateStandardsControlAssociations API. This parameter also provides details about why the request was unprocessed.

Contents

ErrorCode

The error code for the unprocessed update of the control's enablement status in the specified standard.

Type: String

Valid Values: INVALID_INPUT | ACCESS_DENIED | NOT_FOUND | LIMIT_EXCEEDED

Required: Yes

StandardsControlAssociationUpdate

An array of control and standard associations for which an update failed when calling BatchUpdateStandardsControlAssociations.

Type: StandardsControlAssociationUpdate (p. 532) object

Required: Yes

ErrorReason

The reason why a control's enablement status in the specified standard couldn't be updated.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
UpdateAutomationRulesRequestItem

Specifies the parameters to update in an existing automation rule.

Contents

**RuleArn**

The Amazon Resource Name (ARN) for the rule.

Type: String

Pattern: `.\S.*`

Required: Yes

**Actions**

One or more actions to update finding fields if a finding matches the conditions specified in Criteria.

Type: Array of AutomationRulesAction (p. 387) objects

Array Members: Fixed number of 1 item.

Required: No

**Criteria**

A set of ASFF finding field attributes and corresponding expected values that Security Hub uses to filter findings. If a rule is enabled and a finding matches the conditions specified in this parameter, Security Hub applies the rule action to the finding.

Type: AutomationRulesFindingFilters (p. 393) object

Required: No

**Description**

A description of the rule.

Type: String

Pattern: `.\S.*`

Required: No

**IsTerminal**

Specifies whether a rule is the last to be applied with respect to a finding that matches the rule criteria. This is useful when a finding matches the criteria for multiple rules, and each rule has different actions. If a rule is terminal, Security Hub applies the rule action to a finding that matches the rule criteria and doesn't evaluate other rules for the finding. By default, a rule isn't terminal.

Type: Boolean

Required: No

**RuleName**

The name of the rule.

Type: String
Pattern: .\S.*
Required: No

**RuleOrder**

An integer ranging from 1 to 1000 that represents the order in which the rule action is applied to findings. Security Hub applies rules with lower values for this parameter first.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

**RuleStatus**

Whether the rule is active after it is created. If this parameter is equal to ENABLED, Security Hub starts applying the rule to findings and finding updates after the rule is created. To change the value of this parameter after creating a rule, use [BatchUpdateAutomationRules](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_BatchUpdateAutomationRules.html).

Type: String

Valid Values: ENABLED | DISABLED

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_BatchUpdateAutomationRules.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_BatchUpdateAutomationRules.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_BatchUpdateAutomationRules.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_BatchUpdateAutomationRules.html)
Vulnerability

A vulnerability associated with a finding.

Contents

Id

The identifier of the vulnerability.

Type: String

Pattern: .*\S.*

Required: Yes

Cvss

CVSS scores from the advisory related to the vulnerability.

Type: Array of Cvss (p. 440) objects

Required: No

FixAvailable

Specifies if all vulnerable packages in a finding have a value for FixedInVersion and Remediation. This field is evaluated for each vulnerability Id based on the number of vulnerable packages that have a value for both FixedInVersion and Remediation. Valid values are as follows:

- YES if all vulnerable packages have a value for both FixedInVersion and Remediation
- NO if no vulnerable packages have a value for FixedInVersion and Remediation
- PARTIAL otherwise

Type: String

Valid Values: YES | NO | PARTIAL

Required: No

ReferenceUrls

A list of URLs that provide additional information about the vulnerability.

Type: Array of strings

Pattern: .*\S.*

Required: No

RelatedVulnerabilities

List of vulnerabilities that are related to this vulnerability.

Type: Array of strings

Pattern: .*\S.*

Required: No

Vendor

Information about the vendor that generates the vulnerability report.
Type: `VulnerabilityVendor (p. 552)` object

Required: No

**VulnerablePackages**

List of software packages that have the vulnerability.

Type: Array of `SoftwarePackage (p. 520)` objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
VulnerabilityVendor

A vendor that generates a vulnerability report.

Contents

**Name**

The name of the vendor.

Type: String

Pattern: .*\S.*

Required: Yes

**Url**

The URL of the vulnerability advisory.

Type: String

Pattern: .*\S.*

Required: No

**VendorCreatedAt**

Indicates when the vulnerability advisory was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**VendorSeverity**

The severity that the vendor assigned to the vulnerability.

Type: String

Pattern: .*\S.*

Required: No

**VendorUpdatedAt**

Indicates when the vulnerability advisory was last updated.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Workflow

Provides information about the status of the investigation into a finding.

Contents

Status

The status of the investigation into the finding. The workflow status is specific to an individual finding. It does not affect the generation of new findings. For example, setting the workflow status to SUPPRESSED or RESOLVED does not prevent a new finding for the same issue.

The allowed values are the following.
- **NEW** - The initial state of a finding, before it is reviewed.
- **NOTIFIED** - Indicates that you notified the resource owner about the security issue. Used when the initial reviewer is not the resource owner, and needs intervention from the resource owner.
- **SUPPRESSED** - Indicates that you reviewed the finding and do not believe that any action is needed. The finding is no longer updated.
- **RESOLVED** - The finding was reviewed and remediated and is now considered resolved.

Type: String

Valid Values: NEW | NOTIFIED | RESOLVED | SUPPRESSED

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
WorkflowUpdate

Used to update information about the investigation into the finding.

Contents

Status

The status of the investigation into the finding. The workflow status is specific to an individual finding. It does not affect the generation of new findings. For example, setting the workflow status to SUPPRESSED or RESOLVED does not prevent a new finding for the same issue.

The allowed values are the following.

- **NEW** - The initial state of a finding, before it is reviewed.
  
  Security Hub also resets WorkflowStatus from NOTIFIED or RESOLVED to NEW in the following cases:
  
  - The record state changes from ARCHIVED to ACTIVE.
  - The compliance status changes from PASSED to either WARNING, FAILED, or NOT_AVAILABLE.
  - NOTIFIED - Indicates that you notified the resource owner about the security issue. Used when the initial reviewer is not the resource owner, and needs intervention from the resource owner.
  - RESOLVED - The finding was reviewed and remediated and is now considered resolved.
  - SUPPRESSED - Indicates that you reviewed the finding and do not believe that any action is needed. The finding is no longer updated.

Type: String

Valid Values: NEW | NOTIFIED | RESOLVED | SUPPRESSED

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

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**AwsAmazonMqBrokerDetails**

Provides details about an Amazon MQ message broker. A message broker allows software applications and components to communicate using various programming languages, operating systems, and formal messaging protocols.

**Contents**

**AuthenticationStrategy**

The authentication strategy used to secure the broker. The default is SIMPLE.

Type: String

Pattern: \.*\$.*

Required: No

**AutoMinorVersionUpgrade**

Whether automatically upgrade new minor versions for brokers, as new versions are released and supported by Amazon MQ. Automatic upgrades occur during the scheduled maintenance window of the broker or after a manual broker reboot.

Type: Boolean

Required: No

**BrokerArn**

The Amazon Resource Name (ARN) of the broker.

Type: String

Pattern: \.*\$.*

Required: No

**BrokerId**

The unique ID that Amazon MQ generates for the broker.

Type: String

Pattern: \.*\$.*

Required: No

**BrokerName**

The broker's name.

Type: String

Pattern: \.*\$.*

Required: No

**DeploymentMode**

The broker's deployment mode.

Type: String
Pattern: .\S.\s
Required: No

**EncryptionOptions**

Encryption options for the broker. Doesn’t apply to RabbitMQ brokers.

Type: [AwsAmazonMqBrokerEncryptionOptionsDetails](p. 573) object

Required: No

**EngineType**

The type of broker engine.

Type: String

Pattern: .\S.\s

Required: No

**EngineVersion**

The version of the broker engine.

Type: String

Pattern: .\S.\s

Required: No

**HostInstanceType**

The broker's instance type.

Type: String

Pattern: .\S.\s

Required: No

**LdapServerMetadata**

The metadata of the Lightweight Directory Access Protocol (LDAP) server used to authenticate and authorize connections to the broker. This is an optional failover server.

Type: [AwsAmazonMqBrokerLdapServerMetadataDetails](p. 574) object

Required: No

**Logs**

Turns on Amazon CloudWatch logging for brokers.

Type: [AwsAmazonMqBrokerLogsDetails](p. 576) object

Required: No

**MaintenanceWindowStartTime**

The scheduled time period (UTC) during which Amazon MQ begins to apply pending updates or patches to the broker.

Type: [AwsAmazonMqBrokerMaintenanceWindowStartTimeDetails](p. 578) object

Required: No
PubliclyAccessible

Permits connections from applications outside of the VPC that hosts the broker's subnets.

Type: Boolean
Required: No

SecurityGroups

The list of rules (one minimum, 125 maximum) that authorize connections to brokers.

Type: Array of strings
Pattern: .*\S.*
Required: No

StorageType

The broker's storage type.

Type: String
Pattern: .*\S.*
Required: No

SubnetIds

The list of groups that define which subnets and IP ranges the broker can use from different Availability Zones.

Type: Array of strings
Pattern: .*\S.*
Required: No

Users

The list of all broker usernames for the specified broker. Doesn't apply to RabbitMQ brokers.

Type: Array of AwsAmazonMqBrokerUsersDetails (p. 579) objects
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAmazonMqBrokerEncryptionOptionsDetails**

Provides details about broker encryption options.

**Contents**

**KmsKeyId**

The AWS KMS key that's used to encrypt your data at rest. If not provided, Amazon MQ will use a default KMS key to encrypt your data.

Type: String

Pattern: `.*\S.*`

Required: No

**UseAwsOwnedKey**

Specifies that an AWS KMS key should be used for at-rest encryption. Set to `true` by default if no value is provided (for example, for RabbitMQ brokers).

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAmazonMqBrokerLdapServerMetadataDetails**

The metadata of the Lightweight Directory Access Protocol (LDAP) server used to authenticate and authorize connections to the broker. This is an optional failover server.

**Contents**

**Hosts**

Specifies the location of the LDAP server, such as AWS Directory Service for Microsoft Active Directory.

- **Type**: Array of strings
- **Pattern**: .*\S.*
- **Required**: No

**RoleBase**

The distinguished name of the node in the directory information tree (DIT) to search for roles or groups.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**RoleName**

The group name attribute in a role entry whose value is the name of that role.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**RoleSearchMatching**

The LDAP search filter used to find roles within the `RoleBase`.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**RoleSearchSubtree**

The directory search scope for the role. If set to `true`, the scope is to search the entire subtree.

- **Type**: Boolean
- **Required**: No

**ServiceAccountUsername**

A username for the service account, which is an account in your LDAP server that has access to initiate a connection.

- **Type**: String
- **Pattern**: .*\S.*
Required: No

**UserBase**

Selects a particular subtree of the directory information tree (DIT) to search for user entries.

Type: String

Pattern: .*

Required: No

**UserRoleName**

The name of the LDAP attribute in the user's directory entry for the user's group membership.

Type: String

Pattern: .*

Required: No

**UserSearchMatching**

The LDAP search filter used to find users within the `UserBase`.

Type: String

Pattern: .*

Required: No

**UserSearchSubtree**

The directory search scope for the user. If set to true, the scope is to search the entire subtree.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAmazonMqBrokerLogsDetails**

Provides information about logs to be activated for the specified broker.

**Contents**

**Audit**

Activates audit logging. Every user management action made using JMX or the ActiveMQ Web Console is logged. Doesn't apply to RabbitMQ brokers.

Type: Boolean

Required: No

**AuditLogGroup**

The location of the CloudWatch Logs log group where audit logs are sent.

Type: String

Pattern: .*

Required: No

**General**

Activates general logging.

Type: Boolean

Required: No

**GeneralLogGroup**

The location of the CloudWatch Logs log group where general logs are sent.

Type: String

Pattern: .*

Required: No

**Pending**

The list of information about logs that are to be turned on for the specified broker.

Type: **AwsAmazonMqBrokerLogsPendingDetails (p. 577)** object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAmazonMqBrokerLogsPendingDetails**

Provides information about logs to be activated for the specified broker.

**Contents**

**Audit**

Activates audit logging. Every user management action made using JMX or the ActiveMQ Web Console is logged. Doesn't apply to RabbitMQ brokers.

Type: Boolean

Required: No

**General**

Activates general logging.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAmazonMqBrokerMaintenanceWindowStartTimeDetails**

The scheduled time period (UTC) during which Amazon MQ begins to apply pending updates or patches to the broker.

**Contents**

**DayOfWeek**

The day of the week on which the maintenance window falls.

- **Type**: String
- **Pattern**: .\S\.
- **Required**: No

**TimeOfDay**

The time, in 24-hour format, on which the maintenance window falls.

- **Type**: String
- **Pattern**: .\S\.
- **Required**: No

**TimeZone**

The time zone in either the Country/City format or the UTC offset format. UTC is the default format.

- **Type**: String
- **Pattern**: .\S\.
- **Required**: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAmazonMqBrokerUsersDetails**

Provides details about the broker usernames for the specified broker. Doesn't apply to RabbitMQ brokers.

**Contents**

**PendingChange**

The type of change pending for the broker user.

Type: String

Pattern: .*\S.*

Required: No

**Username**

The username of the broker user.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

**Amazon API Gateway**

**Amazon API Gateway objects**

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- [AwsApiGatewayCanarySettings (p. 581)](#)
- [AwsApiGatewayEndpointConfiguration (p. 582)](#)
- [AwsApiGatewayMethodSettings (p. 583)](#)
- [AwsApiGatewayRestApiDetails (p. 586)](#)
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- [AwsApiGatewayV2StageDetails (p. 595)](#)
- [AwsCorsConfiguration (p. 598)](#)
**AwsApiGatewayAccessLogSettings**

Contains information about settings for logging access for the stage.

**Contents**

**DestinationArn**

The ARN of the CloudWatch Logs log group that receives the access logs.

Type: String

Pattern: .*\S.*

Required: No

**Format**

A single-line format of the access logs of data, as specified by selected `$context` variables. The format must include at least `$context.requestId`.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

API Version 2018-10-26
AwsApiGatewayCanarySettings

Contains information about settings for canary deployment in the stage.

Contents

DeploymentId

The deployment identifier for the canary deployment.

Type: String

Pattern: .*\S.*

Required: No

PercentTraffic

The percentage of traffic that is diverted to a canary deployment.

Type: Double

Required: No

StageVariableOverrides

Stage variables that are overridden in the canary release deployment. The variables include new stage variables that are introduced in the canary.

Each variable is represented as a string-to-string map between the stage variable name and the variable value.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

UseStageCache

Indicates whether the canary deployment uses the stage cache.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsApiGatewayEndpointConfiguration**

Contains information about the endpoints for the API.

**Contents**

**Types**

A list of endpoint types for the REST API.

For an edge-optimized API, the endpoint type is **EDGE**. For a Regional API, the endpoint type is **REGIONAL**. For a private API, the endpoint type is **PRIVATE**.

Type: Array of strings

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsApiGatewayMethodSettings**

Defines settings for a method for the stage.

**Contents**

**CacheDataEncrypted**

Indicates whether the cached responses are encrypted.

Type: Boolean

Required: No

**CacheTtlInSeconds**

Specifies the time to live (TTL), in seconds, for cached responses. The higher the TTL, the longer the response is cached.

Type: Integer

Required: No

**CachingEnabled**

Indicates whether responses are cached and returned for requests. For responses to be cached, a cache cluster must be enabled on the stage.

Type: Boolean

Required: No

**DataTraceEnabled**

Indicates whether data trace logging is enabled for the method. Data trace logging affects the log entries that are pushed to CloudWatch Logs.

Type: Boolean

Required: No

**HttpMethod**

The HTTP method. You can use an asterisk (*) as a wildcard to apply method settings to multiple methods.

Type: String

Pattern: .*\S.*

Required: No

**LoggingLevel**

The logging level for this method. The logging level affects the log entries that are pushed to CloudWatch Logs.

If the logging level is ERROR, then the logs only include error-level entries.

If the logging level is INFO, then the logs include both ERROR events and extra informational events.

Valid values: OFF | ERROR | INFO

Type: String
MetricEnabled

Indicates whether CloudWatch metrics are enabled for the method.

Type: Boolean

Required: No

RequireAuthorizationForCacheControl

Indicates whether authorization is required for a cache invalidation request.

Type: Boolean

Required: No

ResourcePath

The resource path for this method. Forward slashes (/) are encoded as ~1. The initial slash must include a forward slash.

For example, the path value /resource/subresource must be encoded as /~1resource~1subresource.

To specify the root path, use only a slash (/). You can use an asterisk (*) as a wildcard to apply method settings to multiple methods.

Type: String

Pattern: .\S*.

Required: No

ThrottlingBurstLimit

The throttling burst limit for the method.

Type: Integer

Required: No

ThrottlingRateLimit

The throttling rate limit for the method.

Type: Double

Required: No

UnauthorizedCacheControlHeaderStrategy

Indicates how to handle unauthorized requests for cache invalidation.

Valid values: FAIL_WITH_403 | SUCCEED_WITH_Response_HEADER | SUCCEED_WITHOUT_RESPONSE_HEADER

Type: String

Pattern: .\S*.

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsApiGatewayRestApiDetails**

Contains information about a REST API in version 1 of Amazon API Gateway.

**Contents**

**ApiKeySource**

The source of the API key for metering requests according to a usage plan.

- HEADER indicates whether to read the API key from the X-API-Key header of a request.
- AUTHORIZER indicates whether to read the API key from the UsageIdentifierKey from a custom authorizer.

Type: String

Pattern: .[^\S].*

Required: No

**BinaryMediaTypes**

The list of binary media types supported by the REST API.

Type: Array of strings

Pattern: .[^\S].*

Required: No

**CreatedDate**

Indicates when the API was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .[^\S].*

Required: No

**Description**

A description of the REST API.

Type: String

Pattern: .[^\S].*

Required: No

**EndpointConfiguration**

The endpoint configuration of the REST API.

Type: `AwsApiGatewayEndpointConfiguration (p. 582)` object

Required: No
Id

The identifier of the REST API.

Type: String

Pattern: .*\S.*

Required: No

MinimumCompressionSize

The minimum size in bytes of a payload before compression is enabled.

If null, then compression is disabled.

If 0, then all payloads are compressed.

Type: Integer

Required: No

Name

The name of the REST API.

Type: String

Pattern: .*\S.*

Required: No

Version

The version identifier for the REST API.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsApiGatewayStageDetails**

Provides information about a version 1 Amazon API Gateway stage.

**Contents**

**AccessLogSettings**

Settings for logging access for the stage.

Type: [AwsApiGatewayAccessLogSettings](p. 580) object

Required: No

**CacheClusterEnabled**

Indicates whether a cache cluster is enabled for the stage.

Type: Boolean

Required: No

**CacheClusterSize**

If a cache cluster is enabled, the size of the cache cluster.

Type: String

Pattern: .*

Required: No

**CacheClusterStatus**

If a cache cluster is enabled, the status of the cache cluster.

Type: String

Pattern: .*

Required: No

**CanarySettings**

Information about settings for canary deployment in the stage.

Type: [AwsApiGatewayCanarySettings](p. 581) object

Required: No

**ClientCertificateId**

The identifier of the client certificate for the stage.

Type: String

Pattern: .*

Required: No

**CreatedDate**

Indicates when the stage was created.
The identifier of the deployment that the stage points to.

**DeploymentId**

- Type: String
- Pattern: .*\S.*
- Required: No

A description of the stage.

**Description**

- Type: String
- Pattern: .*\S.*
- Required: No

The version of the API documentation that is associated with the stage.

**DocumentationVersion**

- Type: String
- Pattern: .*\S.*
- Required: No

Indicates when the stage was most recently updated.

**LastUpdatedDate**

- Type: String
- Pattern: .*\S.*
- Required: No

Defines the method settings for the stage.

**MethodSettings**

- Type: Array of `AwsApiGatewayMethodSettings (p. 583)` objects
- Required: No

The name of the stage.

**StageName**

- Type: String
- Pattern: .*\S.*
- Required: No
TracingEnabled

Indicates whether active tracing with AWS X-Ray is enabled for the stage.

Type: Boolean

Required: No

Variables

A map that defines the stage variables for the stage.

Variable names can have alphanumeric and underscore characters.

Variable values can contain the following characters:
- Uppercase and lowercase letters
- Numbers
- Special characters -._~:/?#&=,

Type: String to string map

Key Pattern: .\S.*

Value Pattern: .\S.*

Required: No

WebAclArn

The ARN of the web ACL associated with the stage.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsApiGatewayV2ApiDetails

Contains information about a version 2 API in Amazon API Gateway.

Contents

ApiEndpoint

The URI of the API.

Uses the format  
\texttt{<api-id>.execute-api.<region>.amazonaws.com}

The stage name is typically appended to the URI to form a complete path to a deployed API stage.

Type: String

Pattern: \.*\S.*

Required: No

ApiId

The identifier of the API.

Type: String

Pattern: \.*\S.*

Required: No

ApiKeySelectionExpression

An API key selection expression. Supported only for WebSocket APIs.

Type: String

Pattern: \.*\S.*

Required: No

CorsConfiguration

A cross-origin resource sharing (CORS) configuration. Supported only for HTTP APIs.

Type: \texttt{AwsCorsConfiguration (p. 598)} object

Required: No

CreatedDate

Indicates when the API was created.

Uses the date-time format specified in \texttt{RFC 3339 section 5.6, Internet Date/Time Format}. The value cannot contain spaces, and date and time should be separated by T. For example, 

Type: String

Pattern: \.*\S.*

Required: No

Description

A description of the API.
Type: String
Pattern: .*\S.*
Required: No

**Name**

The name of the API.

Type: String
Pattern: .*\S.*
Required: No

**ProtocolType**

The API protocol for the API.

Valid values: WEBSOCKET | HTTP

Type: String
Pattern: .*\S.*
Required: No

**RouteSelectionExpression**

The route selection expression for the API.

For HTTP APIs, must be ${request.method} ${request.path}. This is the default value for HTTP APIs.

For WebSocket APIs, there is no default value.

Type: String
Pattern: .*\S.*
Required: No

**Version**

The version identifier for the API.

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsApiGatewayV2RouteSettings

Contains route settings for a stage.

Contents

DataTraceEnabled

Indicates whether data trace logging is enabled. Data trace logging affects the log entries that are pushed to CloudWatch Logs. Supported only for WebSocket APIs.

Type: Boolean
Required: No

DetailedMetricsEnabled

Indicates whether detailed metrics are enabled.

Type: Boolean
Required: No

LoggingLevel

The logging level. The logging level affects the log entries that are pushed to CloudWatch Logs. Supported only for WebSocket APIs.

If the logging level is ERROR, then the logs only include error-level entries.
If the logging level is INFO, then the logs include both ERROR events and extra informational events.

Valid values: OFF | ERROR | INFO

Type: String
Pattern: .*\S.*
Required: No

ThrottlingBurstLimit

The throttling burst limit.

Type: Integer
Required: No

ThrottlingRateLimit

The throttling rate limit.

Type: Double
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsApiGatewayV2StageDetails**

Contains information about a version 2 stage for Amazon API Gateway.

**Contents**

**AccessLogSettings**

Information about settings for logging access for the stage.

Type: [AwsApiGatewayAccessLogSettings](#) object

Required: No

**ApiGatewayManaged**

Indicates whether the stage is managed by API Gateway.

Type: Boolean

Required: No

**AutoDeploy**

Indicates whether updates to an API automatically trigger a new deployment.

Type: Boolean

Required: No

**ClientCertificateId**

The identifier of a client certificate for a stage. Supported only for WebSocket API calls.

Type: String

Pattern: .*

Required: No

**CreatedDate**

Indicates when the stage was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](#). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: No

**DefaultRouteSettings**

Default route settings for the stage.

Type: [AwsApiGatewayV2RouteSettings](#) object

Required: No

**DeploymentId**

The identifier of the deployment that the stage is associated with.
Type: String  
Pattern: .*[^\s].*  
Required: No

**Description**  
The description of the stage.

Type: String  
Pattern: .*[^\s].*  
Required: No

**LastDeploymentStatusMessage**  
The status of the last deployment of a stage. Supported only if the stage has automatic deployment enabled.

Type: String  
Pattern: .*[^\s].*  
Required: No

**LastUpdatedDate**  
Indicates when the stage was most recently updated.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String  
Pattern: .*[^\s].*  
Required: No

**RouteSettings**  
The route settings for the stage.

Type: [AwsApiGatewayV2RouteSettings](https://docs.aws.amazon.com/apigateway/latest/developerguide/apigateway-http-methods.html) object  
Required: No

**StageName**  
The name of the stage.

Type: String  
Pattern: .*[^\s].*  
Required: No

**StageVariables**  
A map that defines the stage variables for the stage.

Variable names can have alphanumeric and underscore characters.

Variable values can contain the following characters:
• Uppercase and lowercase letters
• Numbers
• Special characters -_.~/?#&=,

Type: String to string map

Key Pattern: .[^\S\s].*

Value Pattern: .[^\S\s].*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsCorsConfiguration**

Contains the cross-origin resource sharing (CORS) configuration for the API. CORS is only supported for HTTP APIs.

**Contents**

**AllowCredentials**

Indicates whether the CORS request includes credentials.

Type: Boolean

Required: No

**AllowHeaders**

The allowed headers for CORS requests.

Type: Array of strings

Pattern: .*

Required: No

**AllowMethods**

The allowed methods for CORS requests.

Type: Array of strings

Pattern: .*

Required: No

**AllowOrigins**

The allowed origins for CORS requests.

Type: Array of strings

Pattern: .*

Required: No

**ExposeHeaders**

The exposed headers for CORS requests.

Type: Array of strings

Pattern: .*

Required: No

**MaxAge**

The number of seconds for which the browser caches preflight request results.

Type: Integer

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS AppSync objects

AWS AppSync objects

- AwsAppSyncGraphQlApiDetails (p. 600)
- AwsAppSyncGraphQlApiAdditionalAuthenticationProvidersDetails (p. 602)
- AwsAppSyncGraphQlApiLambdaAuthorizerConfigDetails (p. 603)
- AwsAppSyncGraphQlApiLogConfigDetails (p. 604)
- AwsAppSyncGraphQlApiOpenIdConnectConfigDetails (p. 605)
- AwsAppSyncGraphQlApiUserPoolConfigDetails (p. 606)
AwsAppSyncGraphQlApiDetails

Provides details about an AWS AppSync GraphQL API, which lets you query multiple databases, microservices, and APIs from a single GraphQL endpoint.

Contents

AdditionalAuthenticationProviders

A list of additional authentication providers for the GraphQL API.

Type: Array of AwsAppSyncGraphQlApiAdditionalAuthenticationProvidersDetails (p. 602) objects

Required: No

ApiId

The unique identifier for the API.

Type: String

Pattern: .\S.*

Required: No

Arn

The Amazon Resource Name (ARN) of the API.

Type: String

Pattern: .\S.*

Required: No

AuthenticationType

The type of security configuration for your GraphQL API: API key, AWS Identity and Access Management (IAM), OpenID Connect (OIDC), Amazon Cognito user pools, or AWS Lambda.

Type: String

Pattern: .\S.*

Required: No

Id

The unique identifier for the API.

Type: String

Pattern: .\S.*

Required: No

LambdaAuthorizerConfig

Specifies the configuration for AWS Lambda function authorization.

Type: AwsAppSyncGraphQlApiLambdaAuthorizerConfigDetails (p. 603) object

Required: No
LogConfig

The Amazon CloudWatch Logs configuration.

Type: `AwsAppSyncGraphQlApiLogConfigDetails (p. 604)` object

Required: No

Name

The API name.

Type: String

Pattern: `.\S.*`

Required: No

OpenIdConnectConfig

Specifies the authorization configuration for using an OpenID Connect compliant service with an AWS AppSync GraphQL API endpoint.

Type: `AwsAppSyncGraphQlApiOpenIdConnectConfigDetails (p. 605)` object

Required: No

UserPoolConfig

The Amazon Cognito user pools configuration.

Type: `AwsAppSyncGraphQlApiUserPoolConfigDetails (p. 606)` object

Required: No

WafWebAclArn

The Amazon Resource Name (ARN) of the AWS WAF web access control list (web ACL) associated with this GraphQL API, if one exists.

Type: String

Pattern: `.\S.*`

Required: No

XrayEnabled

Indicates whether to use AWS X-Ray tracing for the GraphQL API.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAppSyncGraphQlApiAdditionalAuthenticationProvidersDetails**

A list of additional authentication providers for the GraphqlApi API.

**Contents**

**AuthenticationType**

The type of security configuration for your GraphQL API: API key, AWS Identity and Access Management (IAM), OpenID Connect (OIDC), Amazon Cognito user pools, or AWS Lambda.

Type: String

Pattern: .[^\S]*

Required: No

**LambdaAuthorizerConfig**

The configuration for Lambda function authorization.

Type: [AwsAppSyncGraphQlApiLambdaAuthorizerConfigDetails](#p.603) object

Required: No

**OpenIdConnectConfig**

The OpenID Connect configuration.

Type: [AwsAppSyncGraphQlApiOpenIdConnectConfigDetails](#p.605) object

Required: No

**UserPoolConfig**

The Amazon Cognito user pools configuration.

Type: [AwsAppSyncGraphQlApiUserPoolConfigDetails](#p.606) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](
- [AWS SDK for Go](
- [AWS SDK for Java V2](
- [AWS SDK for Ruby V3](

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**AwsAppSyncGraphQlApiLambdaAuthorizerConfigDetails**

Specifies the authorization configuration for using an Lambda function with your AWS AppSync GraphQL API endpoint.

**Contents**

**AuthorizerResultTtlInSeconds**

The number of seconds a response should be cached for. The default is 5 minutes (300 seconds).

Type: Integer

Required: No

**AuthorizerUri**

The Amazon Resource Name (ARN) of the Lambda function to be called for authorization. This can be a standard Lambda ARN, a version ARN (.../v3), or an alias ARN.

Type: String

Pattern: .*\S.*

Required: No

**IdentityValidationExpression**

A regular expression for validation of tokens before the Lambda function is called.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAppSyncGraphQLApiLogConfigDetails**

Specifies the logging configuration when writing GraphQL operations and tracing to Amazon CloudWatch for an AWS AppSync GraphQL API.

**Contents**

**CloudWatchLogsRoleArn**

The Amazon Resource Name (ARN) of the service role that AWS AppSync assumes to publish to CloudWatch Logs in your account.

Type: String

Pattern: .*\S.*

Required: No

**ExcludeVerboseContent**

Set to TRUE to exclude sections that contain information such as headers, context, and evaluated mapping templates, regardless of logging level.

Type: Boolean

Required: No

**FieldLogLevel**

The field logging level.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsAppSyncGraphQLApiOpenIdConnectConfigDetails

Specifies the authorization configuration for using an OpenID Connect compliant service with your AWS AppSync GraphQL API endpoint.

Contents

**AuthTtl**

The number of milliseconds that a token is valid after being authenticated.

Type: Long

Required: No

**ClientId**

The client identifier of the relying party at the OpenID identity provider. This identifier is typically obtained when the relying party is registered with the OpenID identity provider. You can specify a regular expression so that AWS AppSync can validate against multiple client identifiers at a time.

Type: String

Pattern: \.*\S.*

Required: No

**IatTtl**

The number of milliseconds that a token is valid after it's issued to a user.

Type: Long

Required: No

**Issuer**

The issuer for the OIDC configuration. The issuer returned by discovery must exactly match the value of iss in the ID token.

Type: String

Pattern: \.*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAppSyncGraphQLApiUserPoolConfigDetails**

Specifies the authorization configuration for using Amazon Cognito user pools with your AWS AppSync GraphQL API endpoint.

**Contents**

**AppIdClientRegex**

A regular expression for validating the incoming Amazon Cognito user pools app client ID. If this value isn't set, no filtering is applied.

Type: String

Pattern: .*$

Required: No

**AwsRegion**

The AWS Region in which the user pool was created.

Type: String

Pattern: .*$

Required: No

**DefaultAction**

The action that you want your GraphQL API to take when a request that uses Amazon Cognito user pools authentication doesn't match the Amazon Cognito user pools configuration.

Type: String

Pattern: .*$

Required: No

**UserPoolId**

The user pool ID.

Type: String

Pattern: .*$

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
• `AwsAthenaWorkGroupConfigurationDetails (p. 608)`
• `AwsAthenaWorkGroupConfigurationResultConfigurationDetails (p. 609)`
• `AwsAthenaWorkGroupConfigurationResultConfigurationEncryptionConfigurationDetails (p. 610)`
• `AwsAthenaWorkGroupDetails (p. 611)`
AwsAthenaWorkGroupConfigurationDetails

The configuration of the workgroup, which includes the location in Amazon Simple Storage Service
(Amazon S3) where query results are stored, the encryption option, if any, used for query results,
whether Amazon CloudWatch metrics are enabled for the workgroup, and the limit for the amount of
bytes scanned (cutoff) per query, if it is specified.

Contents

ResultConfiguration

The location in Amazon S3 where query and calculation results are stored and the encryption option,
if any, used for query and calculation results. These are known as client-side settings. If workgroup
settings override client-side settings, then the query uses the workgroup settings.

Type: AwsAthenaWorkGroupConfigurationResultConfigurationDetails (p. 609) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAthenaWorkGroupConfigurationResultConfigurationDetails**

The location in Amazon Simple Storage Service (Amazon S3) where query and calculation results are stored and the encryption option, if any, used for query and calculation results. These are known as client-side settings. If workgroup settings override client-side settings, then the query uses the workgroup settings.

**Contents**

**EncryptionConfiguration**

Specifies the method used to encrypt the user's data stores in the Athena workgroup.

Type: [AwsAthenaWorkGroupConfigurationResultConfigurationEncryptionConfigurationDetails](p. 610)

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)


**AwsAthenaWorkGroupConfigurationResultConfigurationEncryptionConfigurationDetails**

Specifies the method used to encrypt the user's data stores in the Athena workgroup.

**Contents**

**EncryptionOption**

Indicates whether Amazon Simple Storage Service (Amazon S3) server-side encryption with Amazon S3 managed keys (SSE_S3), server-side encryption with AWS KMS keys (SSE_KMS), or client-side encryption with AWS KMS customer managed keys (CSE_KMS) is used.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**KmsKey**

For SSE_KMS and CSE_KMS, this is the KMS key Amazon Resource Name (ARN) or ID.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAthenaWorkGroupDetails**

Provides information about an Amazon Athena workgroup.

**Contents**

**Configuration**

The configuration of the workgroup, which includes the location in Amazon Simple Storage Service (Amazon S3) where query results are stored, the encryption option, if any, used for query results, whether Amazon CloudWatch metrics are enabled for the workgroup, and the limit for the amount of bytes scanned (cutoff) per query, if it is specified.

Type: `AwsAthenaWorkGroupConfigurationDetails (p. 608)` object

Required: No

**Description**

The workgroup description.

Type: String

Pattern: `.*\S.*`

Required: No

**Name**

The workgroup name.

Type: String

Pattern: `.*\S.*`

Required: No

**State**

Whether the workgroup is enabled or disabled.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
- `AwsBackupBackupPlanAdvancedBackupSettingsDetails (p. 613)`
- `AwsBackupBackupPlanBackupPlanDetails (p. 614)`
- `AwsBackupBackupPlanDetails (p. 615)`
- `AwsBackupBackupPlanLifecycleDetails (p. 616)`
- `AwsBackupBackupPlanRuleCopyActionsDetails (p. 617)`
- `AwsBackupBackupPlanRuleDetails (p. 618)`
- `AwsBackupBackupVaultDetails (p. 620)`
- `AwsBackupBackupVaultNotificationsDetails (p. 622)`
- `AwsBackupRecoveryPointCalculatedLifecycleDetails (p. 623)`
- `AwsBackupRecoveryPointCreatedByDetails (p. 624)`
- `AwsBackupRecoveryPointDetails (p. 625)`
- `AwsBackupRecoveryPointLifecycleDetails (p. 629)`
AwsBackupBackupPlanAdvancedBackupSettingsDetails

Provides a list of backup options for each resource type.

Contents

BackupOptions

Specifies the backup option for a selected resource. This option is only available for Windows Volume Shadow Copy Service (VSS) backup jobs. Valid values are as follows:

- Set to WindowsVSS: enabled to enable the WindowsVSS backup option and create a Windows VSS backup.
- Set to WindowsVSS: disabled to create a regular backup. The WindowsVSS option is not enabled by default.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

ResourceType

The name of a resource type. The only supported resource type is Amazon EC2 instances with Windows VSS.

The only valid value is EC2.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsBackupBackupPlanBackupPlanDetails**

Provides details about an AWS Backup backup plan and an array of `BackupRule` objects, each of which specifies a backup rule.

**Contents**

- **AdvancedBackupSettings**
  - A list of backup options for each resource type.
  - Type: Array of `AwsBackupBackupPlanAdvancedBackupSettingsDetails` objects
  - Required: No

- **BackupPlanName**
  - The display name of a backup plan.
  - Type: String
  - Pattern: `.*\S.*`
  - Required: No

- **BackupPlanRule**
  - An array of `BackupRule` objects, each of which specifies a scheduled task that is used to back up a selection of resources.
  - Type: Array of `AwsBackupBackupPlanRuleDetails` objects
  - Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsBackupBackupPlanDetails**

Provides details about an AWS Backup backup plan and an array of BackupRule objects, each of which specifies a backup rule.

**Contents**

**BackupPlan**

Uniquely identifies the backup plan to be associated with the selection of resources.

Type: `AwsBackupBackupPlanBackupPlanDetails (p. 614)` object

Required: No

**BackupPlanArn**

An Amazon Resource Name (ARN) that uniquely identifies the backup plan.

Type: String

Pattern: `.*\S.*`

Required: No

**BackupPlanId**

A unique ID for the backup plan.

Type: String

Pattern: `.*\S.*`

Required: No

**VersionId**

Unique, randomly generated, Unicode, UTF-8 encoded strings. Version IDs cannot be edited.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsBackupBackupPlanLifecycleDetails**

Provides lifecycle details for the backup plan. A lifecycle defines when a backup is transitioned to cold storage and when it expires.

**Contents**

**DeleteAfterDays**

Specifies the number of days after creation that a recovery point is deleted. Must be greater than 90 days plus `MoveToColdStorageAfterDays`.

- **Type:** Long
- **Required:** No

**MoveToColdStorageAfterDays**

Specifies the number of days after creation that a recovery point is moved to cold storage.

- **Type:** Long
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsBackupBackupPlanRuleCopyActionsDetails**

An array of CopyAction objects, each of which contains details of the copy operation.

**Contents**

**DestinationBackupVaultArn**

An Amazon Resource Name (ARN) that uniquely identifies the destination backup vault for the copied backup.

Type: String

Pattern: .\S+. *

Required: No

**Lifecycle**

Defines when a protected resource is transitioned to cold storage and when it expires. AWS Backup transitions and expires backups automatically according to the lifecycle that you define. If you do not specify a lifecycle, AWS Backup applies the lifecycle policy of the source backup to the destination backup.

Backups transitioned to cold storage must be stored in cold storage for a minimum of 90 days.

Type: [AwsBackupBackupPlanLifecycleDetails (p. 616)](p. 616) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](AWS SDK for C++)
- [AWS SDK for Go](AWS SDK for Go)
- [AWS SDK for Java V2](AWS SDK for Java V2)
- [AWS SDK for Ruby V3](AWS SDK for Ruby V3)
**AwsBackupBackupPlanRuleDetails**

Provides details about an array of BackupRule objects, each of which specifies a scheduled task that is used to back up a selection of resources.

**Contents**

**CompletionWindowMinutes**

A value in minutes after a backup job is successfully started before it must be completed, or it is canceled by AWS Backup.

Type: Long

Required: No

**CopyActions**

An array of CopyAction objects, each of which contains details of the copy operation.

Type: Array of *AwsBackupBackupPlanRuleCopyActionsDetails (p. 617)* objects

Required: No

**EnableContinuousBackup**

Specifies whether AWS Backup creates continuous backups capable of point-in-time restore (PITR).

Type: Boolean

Required: No

**Lifecycle**

Defines when a protected resource is transitioned to cold storage and when it expires. AWS Backup transitions and expires backups automatically according to the lifecycle that you define. If you do not specify a lifecycle, AWS Backup applies the lifecycle policy of the source backup to the destination backup.

Backups transitioned to cold storage must be stored in cold storage for a minimum of 90 days.

Type: *AwsBackupBackupPlanLifecycleDetails (p. 616)* object

Required: No

**RuleId**

Uniquely identifies a rule that is used to schedule the backup of a selection of resources.

Type: String

Pattern: .\*\S\.*

Required: No

**RuleName**

A display name for a backup rule. Must contain 1 to 50 alphanumeric or ‘-_.’ characters.

Type: String

Pattern: .\*\S\.*

Required: No
**ScheduleExpression**

A cron expression in UTC specifying when AWS Backup initiates a backup job.

Type: String

Pattern: .*\S.*

Required: No

**StartWindowMinutes**

A value in minutes after a backup is scheduled before a job will be canceled if it doesn't start successfully.

Type: Long

Required: No

**TargetBackupVault**

The name of a logical container where backups are stored. Backup vaults are identified by names that are unique to the AWS account used to create them and the AWS Region where they are created. They consist of letters, numbers, and hyphens.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/get-started-index.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-golang/v1/developer-guide/get-started-index.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java-v2/index.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/sdk-for-ruby-v3/index.html)
**AwsBackupBackupVaultDetails**

Provides details about an AWS Backup backup vault. In AWS Backup, a backup vault is a container that stores and organizes your backups.

**Contents**

**AccessPolicy**

A resource-based policy that is used to manage access permissions on the target backup vault.

Type: String

Pattern: `.*\S.*`

Required: No

**BackupVaultArn**

An Amazon Resource Name (ARN) that uniquely identifies a backup vault.

Type: String

Pattern: `.*\S.*`

Required: No

**BackupVaultName**

The name of a logical container where backups are stored. Backup vaults are identified by names that are unique to the AWS account used to create them and the AWS Region where they are created. They consist of lowercase letters, numbers, and hyphens.

Type: String

Pattern: `.*\S.*`

Required: No

**EncryptionKeyArn**

The unique ARN associated with the server-side encryption key. You can specify a key to encrypt your backups from services that support full AWS Backup management. If you do not specify a key, AWS Backup creates an AWS KMS key for you by default.

Type: String

Pattern: `.*\S.*`

Required: No

**Notifications**

The Amazon SNS event notifications for the specified backup vault.

Type: `AwsBackupBackupVaultNotificationsDetails (p. 622)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsBackupBackupVaultNotificationsDetails**

Provides details about the Amazon SNS event notifications for the specified backup vault.

### Contents

**BackupVaultEvents**

An array of events that indicate the status of jobs to back up resources to the backup vault. The following events are supported:

- BACKUP_JOB_STARTED | BACKUP_JOB_COMPLETED
- COPY_JOB_STARTED | COPY_JOB_SUCCESSFUL | COPY_JOB_FAILED
- RESTORE_JOB_STARTED | RESTORE_JOB_COMPLETED | RECOVERY_POINT_MODIFIED
- S3_BACKUP_OBJECT_FAILED | S3_RESTORE_OBJECT_FAILED

Type: Array of strings

Pattern: .*\S.*

Required: No

**SnsTopicArn**

The Amazon Resource Name (ARN) that uniquely identifies the Amazon SNS topic for a backup vault's events.

Type: String

Pattern: .*\S.*

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsBackupRecoveryPointCalculatedLifecycleDetails**

Specifies how long in days before a recovery point transitions to cold storage or is deleted.

**Contents**

**DeleteAt**

Specifies the number of days after creation that a recovery point is deleted. Must be greater than 90 days plus `MoveToColdStorageAfterDays`.

- **Type**: String
- **Pattern**: `.*\S.*`
- **Required**: No

**MoveToColdStorageAt**

Specifies the number of days after creation that a recovery point is moved to cold storage.

- **Type**: String
- **Pattern**: `.*\S.*`
- **Required**: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsBackupRecoveryPointCreatedByDetails**

Contains information about the backup plan and rule that AWS Backup used to initiate the recovery point backup.

**Contents**

**BackupPlanArn**

An Amazon Resource Name (ARN) that uniquely identifies a backup plan.

Type: String

Pattern: .*

Required: No

**BackupPlanId**

Uniquely identifies a backup plan.

Type: String

Pattern: .*

Required: No

**BackupPlanVersion**

Unique, randomly generated, Unicode, UTF-8 encoded strings that are at most 1,024 bytes long. Version IDs cannot be edited.

Type: String

Pattern: .*

Required: No

**BackupRuleId**

Uniquely identifies a rule used to schedule the backup of a selection of resources.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsBackupRecoveryPointDetails

Contains detailed information about the recovery points stored in an AWS Backup backup vault. A backup, or recovery point, represents the content of a resource at a specified time.

Contents

BackupSizeInBytes

The size, in bytes, of a backup.

Type: Long

Required: No

BackupVaultArn

An Amazon Resource Name (ARN) that uniquely identifies a backup vault.

Type: String

Pattern: .*\S.*

Required: No

BackupVaultName

The name of a logical container where backups are stored. Backup vaults are identified by names that are unique to the AWS account used to create them and the AWS Region where they are created. They consist of lowercase letters, numbers, and hyphens.

Type: String

Pattern: .*\S.*

Required: No

CalculatedLifecycle

A CalculatedLifecycle object containing DeleteAt and MoveToColdStorageAt timestamps.

Type: AwsBackupRecoveryPointCalculatedLifecycleDetails (p. 623) object

Required: No

CompletionDate

The date and time that a job to create a recovery point is completed, in Unix format and UTC. The value of CompletionDate is accurate to milliseconds. For example, the value 1516925490.087 represents Friday, January 26, 2018 12:11:30.087 AM.

Type: String

Pattern: .*\S.*

Required: No

CreatedBy

Contains identifying information about the creation of a recovery point, including the BackupPlanArn, BackupPlanId, BackupPlanVersion, and BackupRuleId of the backup plan that is used to create it.

Type: AwsBackupRecoveryPointCreatedByDetails (p. 624) object
Required: No

**CreationDate**

The date and time a recovery point is created, in Unix format and UTC. The value of `CreationDate` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

Type: String
Pattern: `.\S.*`
Required: No

**EncryptionKeyArn**

The ARN for the server-side encryption key that is used to protect your backups.

Type: String
Pattern: `.\S.*`
Required: No

**IamRoleArn**

Specifies the IAM role ARN used to create the target recovery point.

Type: String
Pattern: `.\S.*`
Required: No

**IsEncrypted**

A Boolean value that is returned as `TRUE` if the specified recovery point is encrypted, or `FALSE` if the recovery point is not encrypted.

Type: Boolean
Required: No

**LastRestoreTime**

The date and time that a recovery point was last restored, in Unix format and UTC. The value of `LastRestoreTime` is accurate to milliseconds. For example, the value `1516925490.087` represents Friday, January 26, 2018 12:11:30.087 AM.

Type: String
Pattern: `.\S.*`
Required: No

**Lifecycle**

The lifecycle defines when a protected resource is transitioned to cold storage and when it expires. AWS Backup transitions and expires backups automatically according to the lifecycle that you define.

Type: [AwsBackupRecoveryPointLifecycleDetails](#) object
Required: No

**RecoveryPointArn**

An ARN that uniquely identifies a recovery point.
**ResourceArn**

An ARN that uniquely identifies a resource. The format of the ARN depends on the resource type.

Type: String
Pattern: .*\S.*
Required: No

**ResourceType**

The type of AWS resource saved as a recovery point, such as an Amazon EBS volume or an Amazon RDS database.

Type: String
Pattern: .*\S.*
Required: No

**SourceBackupVaultArn**

The ARN for the backup vault where the recovery point was originally copied from. If the recovery point is restored to the same account, this value will be null.

Type: String
Pattern: .*\S.*
Required: No

**Status**

A status code specifying the state of the recovery point. Valid values are as follows:
- COMPLETED
- DELETING
- EXPIRED
- PARTIAL

Type: String
Pattern: .*\S.*
Required: No

**StatusMessage**

A message explaining the reason of the recovery point deletion failure.

Type: String
Pattern: .*\S.*
Required: No

**StorageClass**

Specifies the storage class of the recovery point. Valid values are as follows:
**COLD**
**DELETED**
**WARM**

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsBackupRecoveryPointLifecycleDetails**

Contains an array of Transition objects specifying how long in days before a recovery point transitions to cold storage or is deleted.

**Contents**

**DeleteAfterDays**

Specifies the number of days after creation that a recovery point is deleted. Must be greater than 90 days plus `MoveToColdStorageAfterDays`.

Type: Long  
Required: No

**MoveToColdStorageAfterDays**

Specifies the number of days after creation that a recovery point is moved to cold storage.

Type: Long  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS Certificate Manager**

**AWS Certificate Manager (ACM) objects**

- [AwsCertificateManagerCertificateDetails](#)
- [AwsCertificateManagerCertificateDomainValidationOption](#)
- [AwsCertificateManagerCertificateExtendedKeyUsage](#)
- [AwsCertificateManagerCertificateKeyUsage](#)
- [AwsCertificateManagerCertificateOptions](#)
- [AwsCertificateManagerCertificateRenewalSummary](#)
- [AwsCertificateManagerCertificateResourceRecord](#)
**AwsCertificateManagerCertificateDetails**

Provides details about an AWS Certificate Manager certificate.

**Contents**

**CertificateAuthorityArn**

The ARN of the private certificate authority (CA) that will be used to issue the certificate.

Type: String

Pattern: .\S.*

Required: No

**CreatedAt**

Indicates when the certificate was requested.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S.*

Required: No

**DomainName**

The fully qualified domain name (FQDN), such as www.example.com, that is secured by the certificate.

Type: String

Pattern: .\S.*

Required: No

**DomainValidationOptions**

Contains information about the initial validation of each domain name that occurs as a result of the RequestCertificate request.

Only provided if the certificate type is AMAZON_ISSUED.

Type: Array of [AwsCertificateManagerCertificateDomainValidationOption](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_AwsCertificateManagerCertificateDomainValidationOption.html) objects

Required: No

**ExtendedKeyUsages**

Contains a list of Extended Key Usage X.509 v3 extension objects. Each object specifies a purpose for which the certificate public key can be used and consists of a name and an object identifier (OID).

Type: Array of [AwsCertificateManagerCertificateExtendedKeyUsage](https://docs.aws.amazon.com/securityhub/latest/APIReference/API_AwsCertificateManagerCertificateExtendedKeyUsage.html) objects

Required: No

**FailureReason**

For a failed certificate request, the reason for the failure.
Valid values: NO_AVAILABLE_CONTACTS | ADDITIONAL_VERIFICATION_REQUIRED | DOMAIN_NOT_ALLOWED | INVALID_PUBLIC_DOMAIN | DOMAIN_VALIDATION_DENIED | CAA_ERROR | PCA_LIMIT_EXCEEDED | PCA_INVALID_ARN | PCA_INVALID_STATE | PCA_REQUEST_FAILED | PCA_NAME_CONSTRAINTS_VALIDATION | PCA_RESOURCE_NOT_FOUND | PCA_INVALID_ARGS | PCA_INVALID_DURATION | PCA_ACCESS_DENIED | SLR_NOT_FOUND | OTHER

Type: String
Pattern: .*\S.*
Required: No

ImportedAt

Indicates when the certificate was imported. Provided if the certificate type is IMPORTED.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

InUseBy

The list of ARNs for the AWS resources that use the certificate.

Type: Array of strings
Pattern: .*\S.*
Required: No

IssuedAt

Indicates when the certificate was issued. Provided if the certificate type is AMAZON_ISSUED.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

Issuer

The name of the certificate authority that issued and signed the certificate.

Type: String
Pattern: .*\S.*
Required: No

KeyAlgorithm

The algorithm that was used to generate the public-private key pair.
Valid values: RSA_2048 | RSA_1024 | RSA_4096 | EC_prime256v1 | EC_secp384r1 | EC_secp521r1

Type: String

Pattern: .*\S.*

Required: No

**KeyUsages**

A list of key usage X.509 v3 extension objects.

Type: Array of `AwsCertificateManagerCertificateKeyUsage (p. 638)` objects

Required: No

**NotAfter**

The time after which the certificate becomes invalid.

Uses the date-time format specified in `RFC 3339 section 5.6, Internet Date/Time Format`. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**NotBefore**

The time before which the certificate is not valid.

Uses the date-time format specified in `RFC 3339 section 5.6, Internet Date/Time Format`. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**Options**

Provides a value that specifies whether to add the certificate to a transparency log.

Type: `AwsCertificateManagerCertificateOptions (p. 639)` object

Required: No

**RenewalEligibility**

Whether the certificate is eligible for renewal.

Valid values: ELIGIBLE | INELIGIBLE

Type: String

Pattern: .*\S.*

Required: No
RenewalSummary
Information about the status of the AWS Certificate Manager managed renewal for the certificate. Provided only when the certificate type is AMAZON_ISSUED.

Type: AwsCertificateManagerCertificateRenewalSummary (p. 640) object
Required: No

Serial
The serial number of the certificate.
Type: String
Pattern: .*
Required: No

SignatureAlgorithm
The algorithm that was used to sign the certificate.
Type: String
Pattern: .*
Required: No

Status
The status of the certificate.
Valid values: PENDING_VALIDATION | ISSUED | INACTIVE | EXPIRED | VALIDATION_TIMED_OUT | REVOKED | FAILED
Type: String
Pattern: .*
Required: No

Subject
The name of the entity that is associated with the public key contained in the certificate.
Type: String
Pattern: .*
Required: No

SubjectAlternativeNames
One or more domain names (subject alternative names) included in the certificate. This list contains the domain names that are bound to the public key that is contained in the certificate.

The subject alternative names include the canonical domain name (CN) of the certificate and additional domain names that can be used to connect to the website.
Type: Array of strings
Pattern: .*
Required: No
**Type**

The source of the certificate. For certificates that AWS Certificate Manager provides, Type is AMAZON_ISSUED. For certificates that are imported with ImportCertificate, Type is IMPORTED.

Valid values: IMPORTED | AMAZON_ISSUED | PRIVATE

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
A fully qualified domain name (FQDN) in the certificate.
Type: String
Pattern: .*\S.*
Required: No

ResourceRecord
The CNAME record that is added to the DNS database for domain validation.
Type: AwsCertificateManagerCertificateResourceRecord (p. 642) object
Required: No

ValidationDomain
The domain name that AWS Certificate Manager uses to send domain validation emails.
Type: String
Pattern: .*\S.*
Required: No

ValidationEmails
A list of email addresses that AWS Certificate Manager uses to send domain validation emails.
Type: Array of strings
Pattern: .*\S.*
Required: No

ValidationMethod
The method used to validate the domain name.
Type: String
Pattern: .*\S.*
Required: No

ValidationStatus
The validation status of the domain name.
Type: String
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCertificateManagerCertificateExtendedKeyUsage**

Contains information about an extended key usage X.509 v3 extension object.

**Contents**

**Name**

The name of an extension value. Indicates the purpose for which the certificate public key can be used.

Type: String

Pattern: .\S\.*

Required: No

**OId**

An object identifier (OID) for the extension value.

The format is numbers separated by periods.

Type: String

Pattern: .\S\.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCertificateManagerCertificateKeyUsage**

Contains information about a key usage X.509 v3 extension object.

**Contents**

**Name**

The key usage extension name.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCertificateManagerCertificateOptions**

Contains other options for the certificate.

**Contents**

**CertificateTransparencyLoggingPreference**

  Whether to add the certificate to a transparency log.

  Valid values: DISABLED | ENABLED

  Type: String

  Pattern: .\S\.

  Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCertificateManagerCertificateRenewalSummary**

Contains information about the AWS Certificate Manager managed renewal for an AMAZON_ISSUED certificate.

**Contents**

**DomainValidationOptions**

Information about the validation of each domain name in the certificate, as it pertains to AWS Certificate Manager managed renewal. Provided only when the certificate type is AMAZON_ISSUED.

Type: Array of [AwsCertificateManagerCertificateDomainValidationOption (p. 635)] objects

Required: No

**RenewalStatus**

The status of the AWS Certificate Manager managed renewal of the certificate.

Valid values: PENDING_AUTO_RENEWAL | PENDING_VALIDATION | SUCCESS | FAILED

Type: String

Pattern: .*\S.*

Required: No

**RenewalStatusReason**

The reason that a renewal request was unsuccessful. This attribute is used only when RenewalStatus is FAILED.

Valid values: NO_AVAILABLE_CONTACTS | ADDITIONAL_VERIFICATION_REQUIRED | DOMAIN_NOT_ALLOWED | INVALID_PUBLIC_DOMAIN | DOMAIN_VALIDATION_DENIED | CAA_ERROR | PCA_LIMIT_EXCEEDED | PCA_INVALID_ARN | PCA_INVALID_STATE | PCA_REQUEST_FAILED | PCA_NAME_CONSTRAINTS_VALIDATION | PCA_RESOURCE_NOT_FOUND | PCA_INVALID_ARGS | PCA_INVALID_DURATION | PCA_ACCESS_DENIED | SLR_NOT_FOUND | OTHER

Type: String

Pattern: .*\S.*

Required: No

**UpdatedAt**

Indicates when the renewal summary was last updated.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://datatracker.ietf.org/doc/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsCertificateManagerCertificateResourceRecord

Provides details about the CNAME record that is added to the DNS database for domain validation.

Contents

Name

The name of the resource.

Type: String

Pattern: \.*\S.*

Required: No

Type

The type of resource.

Type: String

Pattern: \.*\S.*

Required: No

Value

The value of the resource.

Type: String

Pattern: \.*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS CloudFormation

AWS CloudFormation objects

- AwsCloudFormationStackDetails (p. 643)
- AwsCloudFormationStackDriftInformationDetails (p. 646)
- AwsCloudFormationStackOutputsDetails (p. 647)
**AwsCloudFormationStackDetails**

Nests a stack as a resource in a top-level template. Nested stacks are stacks created as resources for another stack.

**Contents**

**Capabilities**

The capabilities allowed in the stack.

Type: Array of strings

Pattern: .*

Required: No

**CreationTime**

The time at which the stack was created.

Type: String

Pattern: .*

Required: No

**Description**

A user-defined description associated with the stack.

Type: String

Pattern: .*

Required: No

**DisableRollback**

Boolean to enable or disable rollback on stack creation failures.

Type: Boolean

Required: No

**DriftInformation**

Information about whether a stack's actual configuration differs, or has drifted, from its expected configuration, as defined in the stack template and any values specified as template parameters.

Type: AwsCloudFormationStackDriftInformationDetails (p. 646) object

Required: No

**EnableTerminationProtection**

Whether termination protection is enabled for the stack.

Type: Boolean

Required: No

**LastUpdatedTime**

The time the nested stack was last updated. This field will only be returned if the stack has been updated at least once.
Type: String
Pattern: .*\S.*
Required: No

**NotificationArns**

The Amazon Resource Names (ARNs) of the Amazon SNS topic to which stack-related events are published.

Type: Array of strings
Pattern: .*\S.*
Required: No

**Outputs**

A list of output structures.

Type: Array of `AwsCloudFormationStackOutputsDetails (p. 647)` objects
Required: No

**RoleArn**

The ARN of an IAM role that's associated with the stack.

Type: String
Pattern: .*\S.*
Required: No

**StackId**

Unique identifier of the stack.

Type: String
Pattern: .*\S.*
Required: No

**StackName**

The name associated with the stack.

Type: String
Pattern: .*\S.*
Required: No

**StackStatus**

Current status of the stack.

Type: String
Pattern: .*\S.*
Required: No

**StackStatusReason**

Success or failure message associated with the stack status.
Type: String
Pattern: .\S+. *
Required: No

**TimeoutInMinutes**

The length of time, in minutes, that CloudFormation waits for the nested stack to reach the CREATE_COMPLETE state.

Type: Integer
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsCloudFormationStackDriftInformationDetails

Provides information about the stack's conformity to its expected template configuration.

Contents

StackDriftStatus

Status of the stack's actual configuration compared to its expected template configuration.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsCloudFormationStackOutputsDetails

Provides information about the AWS CloudFormation stack output.

Contents

Description

A user-defined description associated with the output.

Type: String

Pattern: .[^\s].*

Required: No

OutputKey

The key associated with the output.

Type: String

Pattern: .[^\s].*

Required: No

OutputValue

The value associated with the output.

Type: String

Pattern: .[^\s].*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon CloudFront

Amazon CloudFront objects

- AwsCloudFrontDistributionCacheBehavior (p. 649)
- AwsCloudFrontDistributionCacheBehaviors (p. 650)
- AwsCloudFrontDistributionDefaultCacheBehavior (p. 651)
- AwsCloudFrontDistributionDetails (p. 652)
- AwsCloudFrontDistributionLogging (p. 655)
- AwsCloudFrontDistributionOriginCustomOriginConfig (p. 656)
- AwsCloudFrontDistributionOriginGroup (p. 658)
- AwsCloudFrontDistributionOriginGroupFailover (p. 659)
• `AwsCloudFrontDistributionOriginGroupFailoverStatusCodes (p. 660)`
• `AwsCloudFrontDistributionOriginGroups (p. 661)`
• `AwsCloudFrontDistributionOriginItem (p. 662)`
• `AwsCloudFrontDistributionOrigins (p. 664)`
• `AwsCloudFrontDistributionOriginS3OriginConfig (p. 665)`
• `AwsCloudFrontDistributionOriginSslProtocols (p. 666)`
• `AwsCloudFrontDistributionViewerCertificate (p. 667)`
**AwsCloudFrontDistributionCacheBehavior**

Information about a cache behavior for the distribution.

**Contents**

**ViewerProtocolPolicy**

The protocol that viewers can use to access the files in an origin. You can specify the following options:

- **allow-all** - Viewers can use HTTP or HTTPS.
- **redirect-to-https** - CloudFront responds to HTTP requests with an HTTP status code of 301 (Moved Permanently) and the HTTPS URL. The viewer then uses the new URL to resubmit.
- **https-only** - CloudFront responds to HTTP request with an HTTP status code of 403 (Forbidden).

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionCacheBehaviors**

Provides information about caching for the CloudFront distribution.

**Contents**

**Items**

The cache behaviors for the distribution.

Type: Array of [AwsCloudFrontDistributionCacheBehavior](p. 649) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionDefaultCacheBehavior**

Contains information about the default cache configuration for the CloudFront distribution.

**Contents**

**ViewerProtocolPolicy**

The protocol that viewers can use to access the files in an origin. You can specify the following options:

- **allow-all** - Viewers can use HTTP or HTTPS.
- **redirect-to-https** - CloudFront responds to HTTP requests with an HTTP status code of 301 (Moved Permanently) and the HTTPS URL. The viewer then uses the new URL to resubmit.
- **https-only** - CloudFront responds to HTTP request with an HTTP status code of 403 (Forbidden).

Type: String

Pattern: .[^\S\.]*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionDetails**

A CloudFront distribution configuration.

**Contents**

**CacheBehaviors**

Provides information about the cache configuration for the distribution.

Type: *AwsCloudFrontDistributionCacheBehaviors (p. 650)* object

Required: No

**DefaultCacheBehavior**

The default cache behavior for the configuration.

Type: *AwsCloudFrontDistributionDefaultCacheBehavior (p. 651)* object

Required: No

**DefaultRootObject**

The object that CloudFront sends in response to requests from the origin (for example, index.html) when a viewer requests the root URL for the distribution (http://www.example.com) instead of an object in your distribution (http://www.example.com/product-description.html).

Type: String

Pattern: .*

Required: No

**DomainName**

The domain name corresponding to the distribution.

Type: String

Pattern: .*

Required: No

**ETag**

The entity tag is a hash of the object.

Type: String

Pattern: .*

Required: No

**LastModifiedTime**

Indicates when that the distribution was last modified.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

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Required: No

**Logging**

A complex type that controls whether access logs are written for the distribution.

Type: [AwsCloudFrontDistributionLogging](p. 655) object

Required: No

**OriginGroups**

Provides information about the origin groups in the distribution.

Type: [AwsCloudFrontDistributionOriginGroups](p. 661) object

Required: No

**Origins**

A complex type that contains information about origins for this distribution.

Type: [AwsCloudFrontDistributionOrigins](p. 664) object

Required: No

**Status**

Indicates the current status of the distribution.

Type: String

Pattern: .*\S.*

Required: No

**ViewerCertificate**

Provides information about the TLS/SSL configuration that the distribution uses to communicate with viewers.

Type: [AwsCloudFrontDistributionViewerCertificate](p. 667) object

Required: No

**WebAclId**

A unique identifier that specifies the AWS WAF web ACL, if any, to associate with this distribution.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionLogging**

A complex type that controls whether access logs are written for the CloudFront distribution.

**Contents**

**Bucket**

The S3 bucket to store the access logs in.

- **Type:** String
- **Pattern:** .*

- **Required:** No

**Enabled**

With this field, you can enable or disable the selected distribution.

- **Type:** Boolean

- **Required:** No

**IncludeCookies**

Specifies whether you want CloudFront to include cookies in access logs.

- **Type:** Boolean

- **Required:** No

**Prefix**

An optional string that you want CloudFront to use as a prefix to the access log filenames for this distribution.

- **Type:** String

- **Pattern:** .*

- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsCloudFrontDistributionOriginCustomOriginConfig

A custom origin. A custom origin is any origin that is not an Amazon S3 bucket, with one exception. An Amazon S3 bucket that is configured with static website hosting is a custom origin.

Contents

HttpPort

The HTTP port that CloudFront uses to connect to the origin.

Type: Integer

Required: No

HttpsPort

The HTTPS port that CloudFront uses to connect to the origin.

Type: Integer

Required: No

OriginKeepaliveTimeout

Specifies how long, in seconds, CloudFront persists its connection to the origin.

Type: Integer

Required: No

OriginProtocolPolicy

Specifies the protocol (HTTP or HTTPS) that CloudFront uses to connect to the origin.

Type: String

Pattern: .*S.*

Required: No

OriginReadTimeout

Specifies how long, in seconds, CloudFront waits for a response from the origin.

Type: Integer

Required: No

OriginSslProtocols

Specifies the minimum SSL/TLS protocol that CloudFront uses when connecting to your origin over HTTPS.

Type: AwsCloudFrontDistributionOriginSslProtocols (p. 666) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsCloudFrontDistributionOriginGroup

Information about an origin group for the CloudFront distribution.

Contents

FailoverCriteria

Provides the criteria for an origin group to fail over.

Type: AwsCloudFrontDistributionOriginGroupFailover (p. 659) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCloudFrontDistributionOriginGroupFailover**

Provides information about when an origin group fails over.

**Contents**

**StatusCodes**

Information about the status codes that cause an origin group to fail over.

Type: *AwsCloudFrontDistributionOriginGroupFailoverStatusCodes (p. 660)* object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionOriginGroupFailoverStatusCodes**

The status codes that cause an origin group to fail over.

**Contents**

**Items**

The list of status code values that can cause a failover to the next origin.

Type: Array of integers

Required: No

**Quantity**

The number of status codes that can cause a failover.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsCloudFrontDistributionOriginGroups

Provides information about origin groups that are associated with the CloudFront distribution.

Contents

Items

The list of origin groups.

Type: Array of AwsCloudFrontDistributionOriginGroup (p. 658) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCloudFrontDistributionOriginItem**

A complex type that describes the Amazon S3 bucket, HTTP server (for example, a web server), AWS Elemental MediaStore, or other server from which CloudFront gets your files.

**Contents**

**CustomOriginConfig**

An origin that is not an Amazon S3 bucket, with one exception. If the Amazon S3 bucket is configured with static website hosting, use this attribute. If the Amazon S3 bucket is not configured with static website hosting, use the S3OriginConfig type instead.

Type: [AwsCloudFrontDistributionOriginCustomOriginConfig](p. 656) object

Required: No

**DomainName**

Amazon S3 origins: The DNS name of the S3 bucket from which you want CloudFront to get objects for this origin.

Type: String

Pattern: .\^S\.*

Required: No

**Id**

A unique identifier for the origin or origin group.

Type: String

Pattern: .\^S\.*

Required: No

**OriginPath**

An optional element that causes CloudFront to request your content from a directory in your Amazon S3 bucket or your custom origin.

Type: String

Pattern: .\^S\.*

Required: No

**S3OriginConfig**

An origin that is an S3 bucket that is not configured with static website hosting.

Type: [AwsCloudFrontDistributionOriginS3OriginConfig](p. 665) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsCloudFrontDistributionOrigins

A complex type that contains information about origins and origin groups for this CloudFront distribution.

Contents

Items

A complex type that contains origins or origin groups for this distribution.

Type: Array of AwsCloudFrontDistributionOriginItem (p. 662) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCloudFrontDistributionOriginS3OriginConfig**

Information about an origin that is an Amazon S3 bucket that is not configured with static website hosting.

**Contents**

**OriginAccessIdentity**

The CloudFront origin access identity to associate with the origin.

- Type: String
- Pattern: .*\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCloudFrontDistributionOriginSslProtocols**

A complex type that contains information about the SSL/TLS protocols that CloudFront can use when establishing an HTTPS connection with your origin.

**Contents**

**Items**

A list that contains allowed SSL/TLS protocols for this distribution.

- **Type**: Array of strings
- **Pattern**: `.*\S.*`
- **Required**: No

**Quantity**

The number of SSL/TLS protocols that you want to allow CloudFront to use when establishing an HTTPS connection with this origin.

- **Type**: Integer
- **Required**: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsCloudFrontDistributionViewerCertificate

Provides information about the TLS/SSL configuration that the CloudFront distribution uses to communicate with viewers.

Contents

AcmCertificateArn

The ARN of the ACM certificate. Used if the certificate is stored in ACM. If you provide an ACM certificate ARN, you must also provide MinimumCertificateVersion and SslSupportMethod.

Type: String
Pattern: .*\S.*
Required: No

Certificate

The identifier of the certificate. Note that in CloudFront, this attribute is deprecated.

Type: String
Pattern: .*\S.*
Required: No

CertificateSource

The source of the certificate identified by Certificate. Note that in CloudFront, this attribute is deprecated.

Type: String
Pattern: .*\S.*
Required: No

CloudFrontDefaultCertificate

Whether the distribution uses the CloudFront domain name. If set to false, then you provide either AcmCertificateArn or IamCertificateId.

Type: Boolean
Required: No

IamCertificateId

The identifier of the IAM certificate. Used if the certificate is stored in IAM. If you provide IamCertificateId, then you also must provide MinimumProtocolVersion and SslSupportMethod.

Type: String
Pattern: .*\S.*
Required: No

MinimumProtocolVersion

The security policy that CloudFront uses for HTTPS connections with viewers. If SslSupportMethod is sni-only, then MinimumProtocolVersion must be TLSv1 or higher.
Type: String
Pattern: .*$.*
Required: No

**SslSupportMethod**

The viewers that the distribution accepts HTTPS connections from.

Type: String
Pattern: .*$.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS CloudTrail**

**AWS CloudTrail objects**

- [AwsCloudTrailTrailDetails](p. 669)
**AwsCloudTrailTrailDetails**

Provides details about a CloudTrail trail.

**Contents**

**CloudWatchLogsLogGroupArn**

The ARN of the log group that CloudTrail logs are delivered to.

- Type: String
- Pattern: `.*\S.*`
- Required: No

**CloudWatchLogsRoleArn**

The ARN of the role that the CloudWatch Events endpoint assumes when it writes to the log group.

- Type: String
- Pattern: `.*\S.*`
- Required: No

**HasCustomEventSelectors**

Indicates whether the trail has custom event selectors.

- Type: Boolean
- Required: No

**HomeRegion**

The Region where the trail was created.

- Type: String
- Pattern: `.*\S.*`
- Required: No

**IncludeGlobalServiceEvents**

Indicates whether the trail publishes events from global services such as IAM to the log files.

- Type: Boolean
- Required: No

**IsMultiRegionTrail**

Indicates whether the trail applies only to the current Region or to all Regions.

- Type: Boolean
- Required: No

**IsOrganizationTrail**

Whether the trail is created for all accounts in an organization in AWS Organizations, or only for the current AWS account.

- Type: Boolean
KmsKeyId

The AWS KMS key ID to use to encrypt the logs.
Type: String
Pattern: .*\S.*
Required: No

LogFileValidationEnabled

Indicates whether CloudTrail log file validation is enabled.
Type: Boolean
Required: No

Name

The name of the trail.
Type: String
Pattern: .*\S.*
Required: No

S3BucketName

The name of the S3 bucket where the log files are published.
Type: String
Pattern: .*\S.*
Required: No

S3KeyPrefix

The S3 key prefix. The key prefix is added after the name of the S3 bucket where the log files are published.
Type: String
Pattern: .*\S.*
Required: No

SnsTopicArn

The ARN of the SNS topic that is used for notifications of log file delivery.
Type: String
Pattern: .*\S.*
Required: No

SnsTopicName

The name of the SNS topic that is used for notifications of log file delivery.
Type: String
Pattern: .\S+. *
Required: No

**TrailArn**

The ARN of the trail.

Type: String

Pattern: .\S+. *
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

**Amazon CloudWatch**

**Amazon CloudWatch objects**

- [AwsCloudWatchAlarmDetails](#) (p. 672)
- [AwsCloudWatchAlarmDimensionsDetails](#) (p. 676)
**AwsCloudWatchAlarmDetails**

Specifies an alarm and associates it with the specified metric or metric math expression.

**Contents**

**ActionsEnabled**

Indicates whether actions should be executed during any changes to the alarm state.

- **Type**: Boolean
- **Required**: No

**AlarmActions**

The list of actions, specified as Amazon Resource Names (ARNs) to execute when this alarm transitions into an ALARM state from any other state.

- **Type**: Array of strings
- **Pattern**: .*
- **Required**: No

**AlarmArn**

The ARN of the alarm.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**AlarmConfigurationUpdatedTimestamp**

The time stamp of the last update to the alarm configuration.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**AlarmDescription**

The description of the alarm.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**AlarmName**

The name of the alarm. If you don't specify a name, CloudFront generates a unique physical ID and uses that ID for the alarm name.

- **Type**: String
- **Pattern**: .*
- **Required**: No
ComparisonOperator

The arithmetic operation to use when comparing the specified statistic and threshold. The specified statistic value is used as the first operand.

Type: String
Pattern: .*
Required: No

DatapointsToAlarm

The number of datapoints that must be breaching to trigger the alarm.

Type: Integer
Required: No

Dimensions

The dimensions for the metric associated with the alarm.

Type: Array of AwsCloudWatchAlarmDimensionsDetails (p. 676) objects
Required: No

EvaluateLowSampleCountPercentile

Used only for alarms based on percentiles. If ignore, the alarm state does not change during periods with too few data points to be statistically significant. If evaluate or this parameter is not used, the alarm is always evaluated and possibly changes state no matter how many data points are available.

Type: String
Pattern: .*
Required: No

EvaluationPeriods

The number of periods over which data is compared to the specified threshold.

Type: Integer
Required: No

ExtendedStatistic

The percentile statistic for the metric associated with the alarm.

Type: String
Pattern: .*
Required: No

InsufficientDataActions

The actions to execute when this alarm transitions to the INSUFFICIENT_DATA state from any other state. Each action is specified as an ARN.

Type: Array of strings
Pattern: .*
Required: No

**MetricName**

The name of the metric associated with the alarm. This is required for an alarm based on a metric. For an alarm based on a math expression, you use Metrics instead and you can't specify MetricName.

Type: String
Pattern: .\S.*

Required: No

**Namespace**

The namespace of the metric associated with the alarm. This is required for an alarm based on a metric. For an alarm based on a math expression, you can't specify Namespace and you use Metrics instead.

Type: String
Pattern: .\S.*

Required: No

**OkActions**

The actions to execute when this alarm transitions to the OK state from any other state. Each action is specified as an ARN.

Type: Array of strings
Pattern: .\S.*

Required: No

**Period**

The period, in seconds, over which the statistic is applied. This is required for an alarm based on a metric.

Type: Integer

Required: No

**Statistic**

The statistic for the metric associated with the alarm, other than percentile. For percentile statistics, use ExtendedStatistic.

For an alarm based on a metric, you must specify either Statistic or ExtendedStatistic but not both.

For an alarm based on a math expression, you can't specify Statistic. Instead, you use Metrics.

Type: String
Pattern: .\S.*

Required: No

**Threshold**

The value to compare with the specified statistic.
Type: Double
Required: No

**ThresholdMetricId**

In an alarm based on an anomaly detection model, this is the ID of the ANOMALY_DETECTION_BAND function used as the threshold for the alarm.

Type: String
Pattern: .*
Required: No

**TreatMissingData**

Sets how this alarm is to handle missing data points.

Type: String
Pattern: .*
Required: No

**Unit**

The unit of the metric associated with the alarm.

Type: String
Pattern: .*
Required: No

---

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCloudWatchAlarmDimensionsDetails**

Details about the dimensions for the metric associated with the alarm.

**Contents**

**Name**

The name of a dimension.

Type: String

Pattern: .\S.*

Required: No

**Value**

The value of a dimension.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS CodeBuild**

**AWS CodeBuild objects**

- AwsCodeBuildProjectArtifactsDetails (p. 677)
- AwsCodeBuildProjectDetails (p. 679)
- AwsCodeBuildProjectEnvironment (p. 681)
- AwsCodeBuildProjectEnvironmentEnvironmentVariablesDetails (p. 683)
- AwsCodeBuildProjectEnvironmentRegistryCredential (p. 684)
- AwsCodeBuildProjectLogsConfigCloudWatchLogsDetails (p. 685)
- AwsCodeBuildProjectLogsConfigDetails (p. 686)
- AwsCodeBuildProjectLogsConfigS3LogsDetails (p. 687)
- AwsCodeBuildProjectSource (p. 688)
- AwsCodeBuildProjectVpcConfig (p. 690)
AwsCodeBuildProjectArtifactsDetails

Information about the build artifacts for the CodeBuild project.

Contents

ArtifactIdentifier

An identifier for the artifact definition.

Type: String

Pattern: .*\S.*

Required: No

EncryptionDisabled

Indicates whether to disable encryption on the artifact. Only valid when Type is S3.

Type: Boolean

Required: No

Location

Only used when Type is S3. The name of the S3 bucket where the artifact is located.

Type: String

Pattern: .*\S.*

Required: No

Name

Only used when Type is S3. The name of the artifact. Used with NamespaceType and Path to determine the pattern for storing the artifact.

Type: String

Pattern: .*\S.*

Required: No

NamespaceType

Only used when Type is S3. The value to use for the namespace. Used with Name and Path to determine the pattern for storing the artifact.

Type: String

Pattern: .*\S.*

Required: No

OverrideArtifactName

Whether the name specified in the buildspec file overrides the artifact name.

Type: Boolean

Required: No
Packaging

Only used when Type is S3. The type of output artifact to create.

Type: String
Pattern: .*

Required: No

Path

Only used when Type is S3. The path to the artifact. Used with Name and NamespaceType to determine the pattern for storing the artifact.

Type: String
Pattern: .*

Required: No

Type

The type of build artifact.

Type: String
Pattern: .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCodeBuildProjectDetails**

Information about an AWS CodeBuild project.

**Contents**

**Artifacts**

Information about the build artifacts for the CodeBuild project.

Type: Array of [AwsCodeBuildProjectArtifactsDetails](#) objects

Required: No

**EncryptionKey**

The AWS KMS key used to encrypt the build output artifacts.

You can specify either the ARN of the KMS key or, if available, the KMS key alias (using the format alias/alias-name).

Type: String

Pattern: .*\S.*

Required: No

**Environment**

Information about the build environment for this build project.

Type: [AwsCodeBuildProjectEnvironment](#) object

Required: No

**LogsConfig**

Information about logs for the build project.

Type: [AwsCodeBuildProjectLogsConfigDetails](#) object

Required: No

**Name**

The name of the build project.

Type: String

Pattern: .*\S.*

Required: No

**SecondaryArtifacts**

Information about the secondary artifacts for the CodeBuild project.

Type: Array of [AwsCodeBuildProjectArtifactsDetails](#) objects

Required: No

**ServiceRole**

The ARN of the IAM role that enables AWS CodeBuild to interact with dependent AWS services on behalf of the AWS account.
Type: String  
Pattern: .*\S.*  
Required: No

**Source**

Information about the build input source code for this build project.

Type: [AwsCodeBuildProjectSource](#) object

Required: No

**VpcConfig**

Information about the VPC configuration that AWS CodeBuild accesses.

Type: [AwsCodeBuildProjectVpcConfig](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsCodeBuildProjectEnvironment

Information about the build environment for this build project.

Contents

Certificate

The certificate to use with this build project.

Type: String

Pattern: .\S+. *

Required: No

EnvironmentVariables

A set of environment variables to make available to builds for the build project.

Type: Array of AwsCodeBuildProjectEnvironmentEnvironmentVariablesDetails (p. 683) objects

Required: No

ImagePullCredentialsType

The type of credentials AWS CodeBuild uses to pull images in your build.

Valid values:

- CODEBUILD specifies that AWS CodeBuild uses its own credentials. This requires that you modify your ECR repository policy to trust the AWS CodeBuild service principal.
- SERVICE_ROLE specifies that AWS CodeBuild uses your build project's service role.

When you use a cross-account or private registry image, you must use SERVICE_ROLE credentials.
When you use an AWS CodeBuild curated image, you must use CODEBUILD credentials.

Type: String

Pattern: .\S+. *

Required: No

PrivilegedMode

Whether to allow the Docker daemon to run inside a Docker container. Set to true if the build project is used to build Docker images.

Type: Boolean

Required: No

RegistryCredential

The credentials for access to a private registry.

Type: AwsCodeBuildProjectEnvironmentRegistryCredential (p. 684) object

Required: No

Type

The type of build environment to use for related builds.
The environment type **ARM_CONTAINER** is available only in Regions US East (N. Virginia), US East (Ohio), US West (Oregon), Europe (Ireland), Asia Pacific (Mumbai), Asia Pacific (Tokyo), Asia Pacific (Sydney), and Europe (Frankfurt).

The environment type **LINUX_CONTAINER** with compute type build.general1.2xlarge is available only in Regions US East (N. Virginia), US East (N. Virginia), US West (Oregon), Canada (Central), Europe (Ireland), Europe (London), Europe (Frankfurt), Asia Pacific (Tokyo), Asia Pacific (Seoul), Asia Pacific (Singapore), Asia Pacific (Sydney), China (Beijing), and China (Ningxia).

The environment type **LINUX_GPU_CONTAINER** is available only in Regions US East (N. Virginia), US East (N. Virginia), US West (Oregon), Canada (Central), Europe (Ireland), Europe (London), Europe (Frankfurt), Asia Pacific (Tokyo), Asia Pacific (Seoul), Asia Pacific (Singapore), Asia Pacific (Sydney), China (Beijing), and China (Ningxia).

Valid values: WINDOWS_CONTAINER | LINUX_CONTAINER | LINUX_GPU_CONTAINER | ARM_CONTAINER

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsCodeBuildProjectEnvironmentEnvironmentVariablesDetails

Information about an environment variable that is available to builds for the build project.

Contents

Name
The name of the environment variable.
Type: String
Pattern: .*\S.*
Required: No

Type
The type of environment variable.
Type: String
Pattern: .*\S.*
Required: No

Value
The value of the environment variable.
Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCodeBuildProjectEnvironmentRegistryCredential**

The credentials for access to a private registry.

**Contents**

**Credential**

The ARN or name of credentials created using AWS Secrets Manager.

**Note**

The credential can use the name of the credentials only if they exist in your current AWS Region.

Type: String

Pattern: .*\S.*

Required: No

**CredentialProvider**

The service that created the credentials to access a private Docker registry.

The valid value, SECRETS_MANAGER, is for AWS Secrets Manager.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsCodeBuildProjectLogsConfigCloudWatchLogsDetails**

Information about CloudWatch Logs for the build project.

**Contents**

**GroupName**

The group name of the logs in CloudWatch Logs.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Status**

The current status of the logs in CloudWatch Logs for a build project.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**StreamName**

The prefix of the stream name of the CloudWatch Logs.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCodeBuildProjectLogsConfigDetails**

Information about logs for the build project.

**Contents**

**CloudWatchLogs**

Information about CloudWatch Logs for the build project.

Type: `AwsCodeBuildProjectLogsConfigCloudWatchLogsDetails (p. 685)` object

Required: No

**S3Logs**

Information about logs built to an S3 bucket for a build project.

Type: `AwsCodeBuildProjectLogsConfigS3LogsDetails (p. 687)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCodeBuildProjectLogsConfigS3LogsDetails**

Information about logs built to an S3 bucket for a build project.

### Contents

**EncryptionDisabled**

Whether to disable encryption of the S3 build log output.

- **Type:** Boolean
- **Required:** No

**Location**

The ARN of the S3 bucket and the path prefix for S3 logs.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**Status**

The current status of the S3 build logs.

- **Type:** String
- **Pattern:** .*
- **Required:** No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsCodeBuildProjectSource**

Information about the build input source code for this build project.

**Contents**

**GitCloneDepth**

Information about the Git clone depth for the build project.

Type: Integer

Required: No

**InsecureSsl**

Whether to ignore SSL warnings while connecting to the project source code.

Type: Boolean

Required: No

**Location**

Information about the location of the source code to be built.

Valid values include:

- For source code settings that are specified in the source action of a pipeline in AWS CodePipeline, location should not be specified. If it is specified, AWS CodePipeline ignores it. This is because AWS CodePipeline uses the settings in a pipeline's source action instead of this value.
- For source code in an AWS CodeCommit repository, the HTTPS clone URL to the repository that contains the source code and the build spec file (for example, https://git-codecommit.region-ID.amazonaws.com/v1/repos/repo-name).
- For source code in an S3 input bucket, one of the following.
  - The path to the ZIP file that contains the source code (for example, bucket-name/path/to/object-name.zip).
  - The path to the folder that contains the source code (for example, bucket-name/path/to/source-code/folder/).
- For source code in a GitHub repository, the HTTPS clone URL to the repository that contains the source and the build spec file.
- For source code in a Bitbucket repository, the HTTPS clone URL to the repository that contains the source and the build spec file.

Type: String

Pattern: .*\S.*

Required: No

**Type**

The type of repository that contains the source code to be built. Valid values are:

- BITBUCKET - The source code is in a Bitbucket repository.
- CODECOMMIT - The source code is in an AWS CodeCommit repository.
- CODEPIPELINE - The source code settings are specified in the source action of a pipeline in AWS CodePipeline.
- GITHUB - The source code is in a GitHub repository.
- GITHUB_ENTERPRISE - The source code is in a GitHub Enterprise repository.
• NO_SOURCE - The project does not have input source code.
• S3 - The source code is in an S3 input bucket.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsCodeBuildProjectVpcConfig**

Information about the VPC configuration that AWS CodeBuild accesses.

**Contents**

**SecurityGroupIds**

A list of one or more security group IDs in your VPC.

Type: Array of strings

Pattern: .\S.*

Required: No

**Subnets**

A list of one or more subnet IDs in your VPC.

Type: Array of strings

Pattern: .\S.*

Required: No

**VpcId**

The ID of the VPC.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon DynamoDB**

**Amazon DynamoDB objects**

- AwsDynamoDbTableAttributeDefinition (p. 692)
- AwsDynamoDbTableBillingModeSummary (p. 693)
- AwsDynamoDbTableDetails (p. 694)
- AwsDynamoDbTableGlobalSecondaryIndex (p. 697)
- AwsDynamoDbTableKeySchema (p. 699)
- AwsDynamoDbTableLocalSecondaryIndex (p. 700)
- AwsDynamoDbTableProjection (p. 701)
- AwsDynamoDbTableProvisionedThroughput (p. 702)
• `AwsDynamoDbTableProvisionedThroughputOverride` (p. 704)
• `AwsDynamoDbTableReplica` (p. 705)
• `AwsDynamoDbTableReplicaGlobalSecondaryIndex` (p. 707)
• `AwsDynamoDbTableRestoreSummary` (p. 708)
• `AwsDynamoDbTableSseDescription` (p. 709)
• `AwsDynamoDbTableStreamSpecification` (p. 710)
**AwsDynamoDbTableAttributeDefinition**

Contains a definition of an attribute for the table.

**Contents**

**AttributeName**

The name of the attribute.

Type: String

Pattern: .\S.*

Required: No

**AttributeType**

The type of the attribute.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsDynamoDbTableBillingModeSummary**

Provides information about the billing for read/write capacity on the table.

**Contents**

**BillingMode**

The method used to charge for read and write throughput and to manage capacity.

Type: String

Pattern: .*\S.*

Required: No

**LastUpdateToPayPerRequestDateTime**

If the billing mode is PAY_PER_REQUEST, indicates when the billing mode was set to that value.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsDynamoDbTableDetails**

Provides details about a DynamoDB table.

**Contents**

**AttributeDefinitions**

A list of attribute definitions for the table.

Type: Array of [AwsDynamoDbTableAttributeDefinition](p. 692) objects

Required: No

**BillingModeSummary**

Information about the billing for read/write capacity on the table.

Type: [AwsDynamoDbTableBillingModeSummary](p. 693) object

Required: No

**CreationDateTime**

Indicates when the table was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**GlobalSecondaryIndexes**

List of global secondary indexes for the table.

Type: Array of [AwsDynamoDbTableGlobalSecondaryIndex](p. 697) objects

Required: No

**GlobalTableVersion**

The version of global tables being used.

Type: String

Pattern: .*\S.*

Required: No

**ItemCount**

The number of items in the table.

Type: Integer

Required: No

**KeySchema**

The primary key structure for the table.
Type: Array of `AwsDynamoDbTableKeySchema (p. 699)` objects

Required: No

**LatestStreamArn**

The ARN of the latest stream for the table.

Type: String

Pattern: `.*\S.*`

Required: No

**LatestStreamLabel**

The label of the latest stream. The label is not a unique identifier.

Type: String

Pattern: `.*\S.*`

Required: No

**LocalSecondaryIndexes**

The list of local secondary indexes for the table.

Type: Array of `AwsDynamoDbTableLocalSecondaryIndex (p. 700)` objects

Required: No

**ProvisionedThroughput**

Information about the provisioned throughput for the table.

Type: `AwsDynamoDbTableProvisionedThroughput (p. 702)` object

Required: No

**Replicas**

The list of replicas of this table.

Type: Array of `AwsDynamoDbTableReplica (p. 705)` objects

Required: No

**RestoreSummary**

Information about the restore for the table.

Type: `AwsDynamoDbTableRestoreSummary (p. 708)` object

Required: No

**SseDescription**

Information about the server-side encryption for the table.

Type: `AwsDynamoDbTableSseDescription (p. 709)` object

Required: No

**StreamSpecification**

The current DynamoDB Streams configuration for the table.
Type: `AwsDynamoDbTableStreamSpecification (p. 710)` object

Required: No

**TableId**

The identifier of the table.

Type: String

Pattern: `.\S.*`

Required: No

**TableName**

The name of the table.

Type: String

Pattern: `.\S.*`

Required: No

**TableSizeBytes**

The total size of the table in bytes.

Type: Long

Required: No

**TableStatus**

The current status of the table. Valid values are as follows:

- ACTIVE
- ARCHIVED
- ARCHIVING
- CREATING
- DELETING
- INACCESSIBLE_ENCRYPTION_CREDENTIALS
- UPDATING

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsDynamoDbTableGlobalSecondaryIndex**

Information about a global secondary index for the table.

**Contents**

**Backfilling**

Whether the index is currently backfilling.

*Type: Boolean*

*Required: No*

**IndexArn**

The ARN of the index.

*Type: String*

*Pattern: .*\S.**

*Required: No*

**IndexName**

The name of the index.

*Type: String*

*Pattern: .*\S.**

*Required: No*

**IndexSizeBytes**

The total size in bytes of the index.

*Type: Long*

*Required: No*

**IndexStatus**

The current status of the index.

- ACTIVE
- CREATING
- DELETING
- UPDATING

*Type: String*

*Pattern: .*\S.**

*Required: No*

**ItemCount**

The number of items in the index.

*Type: Integer*

*Required: No*
KeySchema

The key schema for the index.

Type: Array of `AwsDynamoDbTableKeySchema (p. 699)` objects

Required: No

Projection

Attributes that are copied from the table into an index.

Type: `AwsDynamoDbTableProjection (p. 701)` object

Required: No

ProvisionedThroughput

Information about the provisioned throughput settings for the indexes.

Type: `AwsDynamoDbTableProvisionedThroughput (p. 702)` object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsDynamoDbTableKeySchema

A component of the key schema for the DynamoDB table, a global secondary index, or a local secondary index.

Contents

AttributeName

The name of the key schema attribute.

Type: String
Pattern: .\S.*
Required: No

KeyType

The type of key used for the key schema attribute. Valid values are HASH or RANGE.

Type: String
Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsDynamoDbTableLocalSecondaryIndex**

Information about a local secondary index for a DynamoDB table.

**Contents**

**IndexArn**

The ARN of the index.

Type: String

Pattern: .*

Required: No

**IndexName**

The name of the index.

Type: String

Pattern: .*

Required: No

**KeySchema**

The complete key schema for the index.

Type: Array of `AwsDynamoDbTableKeySchema` objects

Required: No

**Projection**

Attributes that are copied from the table into the index. These are in addition to the primary key attributes and index key attributes, which are automatically projected.

Type: `AwsDynamoDbTableProjection` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsDynamoDbTableProjection**

For global and local secondary indexes, identifies the attributes that are copied from the table into the index.

**Contents**

**NonKeyAttributes**

The nonkey attributes that are projected into the index. For each attribute, provide the attribute name.

Type: Array of strings

Pattern: .*\S.*

Required: No

**ProjectionType**

The types of attributes that are projected into the index. Valid values are as follows:

- ALL
- INCLUDE
- KEYS_ONLY

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
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AwsDynamoDbTableProvisionedThroughput

Information about the provisioned throughput for the table or for a global secondary index.

Contents

LastDecreaseDateTime

Indicates when the provisioned throughput was last decreased.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

LastIncreaseDateTime

Indicates when the provisioned throughput was last increased.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

NumberOfDecreasesToday

The number of times during the current UTC calendar day that the provisioned throughput was decreased.

Type: Integer
Required: No

ReadCapacityUnits

The maximum number of strongly consistent reads consumed per second before DynamoDB returns a ThrottlingException.

Type: Integer
Required: No

WriteCapacityUnits

The maximum number of writes consumed per second before DynamoDB returns a ThrottlingException.

Type: Integer
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsDynamoDbTableProvisionedThroughputOverride**

Replica-specific configuration for the provisioned throughput.

**Contents**

**ReadCapacityUnits**

The read capacity units for the replica.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsDynamoDbTableReplica**

Information about a replica of a DynamoDB table.

**Contents**

**GlobalSecondaryIndexes**

List of global secondary indexes for the replica.

Type: Array of [AwsDynamoDbTableReplicaGlobalSecondaryIndex (p. 707)] objects

Required: No

**KmsKeyId**

The identifier of the AWS KMS key that will be used for AWS KMS encryption for the replica.

Type: String

Pattern: .*\S.*

Required: No

**ProvisionedThroughputOverride**

Replica-specific configuration for the provisioned throughput.

Type: [AwsDynamoDbTableProvisionedThroughputOverride (p. 704)] object

Required: No

**RegionName**

The name of the Region where the replica is located.

Type: String

Pattern: .*\S.*

Required: No

**ReplicaStatus**

The current status of the replica. Valid values are as follows:

- ACTIVE
- CREATING
- CREATION_FAILED
- DELETING
- UPDATING

Type: String

Pattern: .*\S.*

Required: No

**ReplicaStatusDescription**

Detailed information about the replica status.

Type: String
Pattern: . *\S . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsDynamoDbTableReplicaGlobalSecondaryIndex**

Information about a global secondary index for a DynamoDB table replica.

**Contents**

**IndexName**

The name of the index.

Type: String

Pattern: .[^\s.]*

Required: No

**ProvisionedThroughputOverride**

Replica-specific configuration for the provisioned throughput for the index.

Type: **AwsDynamoDbTableProvisionedThroughputOverride** (p. 704) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsDynamoDbTableRestoreSummary**

Information about the restore for the table.

**Contents**

**RestoreDateTime**

Indicates the point in time that the table was restored to.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**RestoreInProgress**

Whether a restore is currently in progress.

Type: Boolean

Required: No

**SourceBackupArn**

The ARN of the source backup from which the table was restored.

Type: String

Pattern: .*\S.*

Required: No

**SourceTableArn**

The ARN of the source table for the backup.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/api-reference.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/api/

- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java/v2/developer-guide/api-reference.html)
**AwsDynamoDbTableSseDescription**

Information about the server-side encryption for the table.

**Contents**

**InaccessibleEncryptionDateTime**

If the key is inaccessible, the date and time when DynamoDB detected that the key was inaccessible.

Uses the *date-time* format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S+. *

Required: No

**KmsMasterKeyArn**

The ARN of the AWS KMS key that is used for the AWS KMS encryption.

Type: String

Pattern: .\S+. *

Required: No

**SseType**

The type of server-side encryption.

Type: String

Pattern: .\S+. *

Required: No

**Status**

The status of the server-side encryption.

Type: String

Pattern: .\S+. *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java/v1/developer-guide/index.html)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsDynamoDbTableStreamSpecification**

The current DynamoDB Streams configuration for the table.

**Contents**

**StreamEnabled**

Indicates whether DynamoDB Streams is enabled on the table.

Type: Boolean

Required: No

**StreamViewType**

Determines the information that is written to the table.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon EC2**

**Amazon EC2 objects**

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- AwsEc2InstanceDetails (p. 715)
- AwsEc2InstanceMetadataOptions (p. 718)
- AwsEc2InstanceMonitoringDetails (p. 720)
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• AwsEc2VpnConnectionVgwTelemetryDetails (p. 833)
**AwsEc2EipDetails**

Information about an Elastic IP address.

**Contents**

**AllocationId**

The identifier that AWS assigns to represent the allocation of the Elastic IP address for use with Amazon VPC.

Type: String

Pattern: .*\S.*

Required: No

**AssociationId**

The identifier that represents the association of the Elastic IP address with an EC2 instance.

Type: String

Pattern: .*\S.*

Required: No

**Domain**

The domain in which to allocate the address.

If the address is for use with EC2 instances in a VPC, then `Domain` is `vpc`. Otherwise, `Domain` is `standard`.

Type: String

Pattern: .*\S.*

Required: No

**InstanceId**

The identifier of the EC2 instance.

Type: String

Pattern: .*\S.*

Required: No

**NetworkBorderGroup**

The name of the location from which the Elastic IP address is advertised.

Type: String

Pattern: .*\S.*

Required: No

**NetworkInterfaceId**

The identifier of the network interface.

Type: String
Pattern: .*\S.*
Required: No

**NetworkInterfaceOwnerId**

The AWS account ID of the owner of the network interface.

Type: String
Pattern: .*\S.*
Required: No

**PrivateIpAddress**

The private IP address that is associated with the Elastic IP address.

Type: String
Pattern: .*\S.*
Required: No

**PublicIp**

A public IP address that is associated with the EC2 instance.

Type: String
Pattern: .*\S.*
Required: No

**PublicIpv4Pool**

The identifier of an IP address pool. This parameter allows Amazon EC2 to select an IP address from the address pool.

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsEc2InstanceDetails

The details of an Amazon EC2 instance.

Contents

IamInstanceProfileArn

The IAM profile ARN of the instance.

Type: String

Pattern: .*\S.*

Required: No

ImageId

The Amazon Machine Image (AMI) ID of the instance.

Type: String

Pattern: .*\S.*

Required: No

IpV4Addresses

The IPv4 addresses associated with the instance.

Type: Array of strings

Pattern: .*\S.*

Required: No

IpV6Addresses

The IPv6 addresses associated with the instance.

Type: Array of strings

Pattern: .*\S.*

Required: No

KeyName

The key name associated with the instance.

Type: String

Pattern: .*\S.*

Required: No

LaunchedAt

Indicates when the instance was launched.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format.
The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
MetadataOptions

Details about the metadata options for the Amazon EC2 instance.

Type: `AwsEc2InstanceMetadataOptions (p. 718)` object

Required: No

Monitoring

Describes the type of monitoring that's turned on for an instance.

Type: `AwsEc2InstanceMonitoringDetails (p. 720)` object

Required: No

NetworkInterfaces

The identifiers of the network interfaces for the EC2 instance. The details for each network interface are in a corresponding `AwsEc2NetworkInterfacesDetails` object.

Type: Array of `AwsEc2InstanceNetworkInterfacesDetails (p. 721)` objects

Required: No

SubnetId

The identifier of the subnet that the instance was launched in.

Type: String

Pattern: `.*\S.*`

Required: No

Type

The instance type of the instance.

Type: String

Pattern: `.*\S.*`

Required: No

VirtualizationType

The virtualization type of the Amazon Machine Image (AMI) required to launch the instance.

Type: String

Pattern: `.*\S.*`

Required: No

VpcId

The identifier of the VPC that the instance was launched in.

Type: String

Pattern: `.*\S.*`
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2InstanceMetadataOptions**

Metadata options that allow you to configure and secure the Amazon EC2 instance.

**Contents**

**HttpEndpoint**

Enables or disables the HTTP metadata endpoint on the instance.

Type: String
Pattern: .*

Required: No

**HttpProtocolIpv6**

Enables or disables the IPv6 endpoint for the instance metadata service.

Type: String
Pattern: .*

Required: No

**HttpPutResponseHopLimit**

The desired HTTP PUT response hop limit for instance metadata requests. The larger the number, the further instance metadata requests can travel.

Type: Integer

Required: No

**HttpTokens**

The state of token usage for your instance metadata requests.

Type: String
Pattern: .*

Required: No

**InstanceMetadataTags**

Specifies whether to allow access to instance tags from the instance metadata.

Type: String
Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEc2InstanceMonitoringDetails**

The type of monitoring that's turned on for an Amazon EC2 instance.

**Contents**

**State**

Indicates whether detailed monitoring is turned on. Otherwise, basic monitoring is turned on.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2InstanceNetworkInterfacesDetails**

Identifies a network interface for the Amazon EC2 instance.

**Contents**

**NetworkInterfaceId**

The identifier of the network interface. The details are in a corresponding `AwsEc2NetworkInterfacesDetails` object.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataBlockDeviceMappingSetDetails**

Information about a block device mapping for an Amazon Elastic Compute Cloud (Amazon EC2) launch template.

**Contents**

**DeviceName**

The device name.

Type: String

Pattern: .*\S.*

Required: No

**Ebs**

Parameters used to automatically set up Amazon EBS volumes when the instance is launched.

Type: **AwsEc2LaunchTemplateDataBlockDeviceMappingSetEbsDetails** (p. 723) object

Required: No

**NoDevice**

Omits the device from the block device mapping when an empty string is specified.

Type: String

Pattern: .*\S.*

Required: No

**VirtualName**

The virtual device name (ephemeralN). Instance store volumes are numbered starting from 0. An instance type with 2 available instance store volumes can specify mappings for ephemeral0 and ephemeral1. The number of available instance store volumes depends on the instance type.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsEc2LaunchTemplateDataBlockDeviceMappingSetEbsDetails

Parameters for a block device for an Amazon Elastic Block Store (Amazon EBS) volume in an Amazon EC2 launch template.

Contents

DeleteOnTermination

  Indicates whether the EBS volume is deleted on instance termination.

  Type: Boolean

  Required: No

Encrypted

  Indicates whether the EBS volume is encrypted. Encrypted volumes can only be attached to instances that support Amazon EBS encryption. If you're creating a volume from a snapshot, you can't specify an encryption value.

  Type: Boolean

  Required: No

Iops

  The number of I/O operations per second (IOPS).

  Type: Integer

  Required: No

KmsKeyId

  The Amazon Resource Name (ARN) of the symmetric AWS Key Management Service (AWS KMS) customer managed key used for encryption.

  Type: String

  Pattern: .*$

  Required: No

SnapshotId

  The ID of the EBS snapshot.

  Type: String

  Pattern: .*$

  Required: No

Throughput

  The throughput to provision for a gp3 volume, with a maximum of 1,000 MiB/s.

  Type: Integer

  Required: No

VolumeSize

  The size of the volume, in GiBs. You must specify either a snapshot ID or a volume size.
Type: Integer
Required: No

**VolumeType**

The volume type.

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataCapacityReservationSpecificationCapacityReservationTargetDetails**

Information about the target Capacity Reservation or Capacity Reservation group in which to run an Amazon EC2 instance.

**Contents**

**CapacityReservationId**

The ID of the Capacity Reservation in which to run the instance.

Type: String

Pattern: .*\S.*

Required: No

**CapacityReservationResourceGroupArn**

The Amazon Resource Name (ARN) of the Capacity Reservation resource group in which to run the instance.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataCapacityReservationSpecificationDetails**

Specifies the Capacity Reservation targeting option of an Amazon EC2 instance.

**Contents**

**CapacityReservationPreference**

Indicates the instance's Capacity Reservation preferences. If equal to open, the instance can run in any open Capacity Reservation that has matching attributes (instance type, platform, Availability Zone). If equal to none, the instance avoids running in a Capacity Reservation even if one is available. The instance runs in On-Demand capacity.

Type: String

Pattern: .\S\.

Required: No

**CapacityReservationTarget**

Specifies a target Capacity Reservation.

Type:

[AwsEc2LaunchTemplateDataCapacityReservationSpecificationCapacityReservationTargetDetails (p. 725)](#)

object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2LaunchTemplateDataCpuOptionsDetails

Specifies the CPU options for an Amazon EC2 instance. For more information, see [Optimize CPU options](#) in the *Amazon Elastic Compute Cloud User Guide*.

**Contents**

**CoreCount**

The number of CPU cores for the instance.

*Type: Integer*

*Required: No*

**ThreadsPerCore**

The number of threads per CPU core. A value of 1 disables multithreading for the instance, The default value is 2.

*Type: Integer*

*Required: No*

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataCreditSpecificationDetails**

Specifies the credit option for CPU usage of a T2, T3, or T3a Amazon EC2 instance.

**Contents**

**CpuCredits**

The credit option for CPU usage of a T instance.

- **Type:** String
- **Pattern:** \.*\S.\*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataDetails**

The information to include in an Amazon Elastic Compute Cloud (Amazon EC2) launch template.

**Contents**

**BlockDeviceMappingSet**

Information about a block device mapping for an Amazon EC2 launch template.

Type: Array of [AwsEc2LaunchTemplateDataBlockDeviceMappingSetDetails](#) objects

Required: No

**CapacityReservationSpecification**

Specifies an instance's Capacity Reservation targeting option. You can specify only one option at a time.

Type: [AwsEc2LaunchTemplateDataCapacityReservationSpecificationDetails](#) object

Required: No

**CpuOptions**

Specifies the CPU options for an instance. For more information, see [Optimize CPU options](#) in the Amazon Elastic Compute Cloud User Guide.

Type: [AwsEc2LaunchTemplateDataCpuOptionsDetails](#) object

Required: No

**CreditSpecification**

Specifies the credit option for CPU usage of a T2, T3, or T3a instance.

Type: [AwsEc2LaunchTemplateDataCreditSpecificationDetails](#) object

Required: No

**DisableApiStop**

Indicates whether to enable the instance for stop protection. For more information, see [Enable stop protection](#) in the Amazon EC2 User Guide.

Type: Boolean

Required: No

**DisableApiTermination**

If you set this parameter to `true`, you can't terminate the instance using the Amazon EC2 console, AWS CLI, or API. If set to `false`, you can.

Type: Boolean

Required: No

**EbsOptimized**

Indicates whether the instance is optimized for Amazon EBS I/O.

Type: Boolean

Required: No
ElasticGpuSpecificationSet

Provides details about Elastic Graphics accelerators to associate with the instance.

Type: Array of `AwsEc2LaunchTemplateDataElasticGpuSpecificationSetDetails (p. 734)` objects

Required: No

ElasticInferenceAcceleratorSet

The Amazon Elastic Inference accelerator for the instance.

Type: Array of `AwsEc2LaunchTemplateDataElasticInferenceAcceleratorSetDetails (p. 735)` objects

Required: No

EnclaveOptions

Indicates whether the Amazon EC2 instance is enabled for AWS Nitro Enclaves.

Type: `AwsEc2LaunchTemplateDataEnclaveOptionsDetails (p. 736)` object

Required: No

HibernationOptions

Specifies whether your Amazon EC2 instance is configured for hibernation.

Type: `AwsEc2LaunchTemplateDataHibernationOptionsDetails (p. 737)` object

Required: No

IamInstanceProfile

The name or Amazon Resource Name (ARN) of an IAM instance profile.

Type: `AwsEc2LaunchTemplateDataIamInstanceProfileDetails (p. 738)` object

Required: No

ImageId

The ID of the Amazon Machine Image (AMI).

Type: String

Pattern: .\S. *

Required: No

InstanceInitiatedShutdownBehavior

Provides the options for specifying the instance initiated shutdown behavior.

Type: String

Pattern: .\S. *

Required: No

InstanceMarketOptions

Specifies the market (purchasing) option for an instance.

Type: `AwsEc2LaunchTemplateDataInstanceMarketOptionsDetails (p. 739)` object

Required: No
**InstanceRequirements**

The attributes for the instance types. When you specify instance attributes, Amazon EC2 will identify instance types with these attributes. If you specify `InstanceRequirements`, you can't specify `InstanceType`.

Type: `AwsEc2LaunchTemplateDataInstanceRequirementsDetails (p. 745)` object

Required: No

**InstanceType**

The instance type. For more information, see `instance types` in the *Amazon EC2 User Guide*. If you specify `InstanceType`, you can't specify `InstanceRequirements`.

Type: String

Pattern: `.\S.*`

Required: No

**KernelId**

The ID of the kernel.

Type: String

Pattern: `.\S.*`

Required: No

**KeyName**

The name of the key pair that allows users to connect to the instance.

Type: String

Pattern: `.\S.*`

Required: No

**LicenseSet**

Specifies a license configuration for an instance.

Type: Array of `AwsEc2LaunchTemplateDataLicenseSetDetails (p. 754)` objects

Required: No

**MaintenanceOptions**

The maintenance options of your instance.

Type: `AwsEc2LaunchTemplateDataMaintenanceOptionsDetails (p. 755)` object

Required: No

**MetadataOptions**

The metadata options for the instance. For more information, see `Instance metadata and user data` in the *Amazon EC2 User Guide*.

Type: `AwsEc2LaunchTemplateDataMetadataOptionsDetails (p. 756)` object

Required: No
Monitoring

The monitoring for the instance.

Type: `AwsEc2LaunchTemplateDataMonitoringDetails (p. 758)` object

Required: No

NetworkInterfaceSet

Specifies the parameters for a network interface that is attached to the instance.

Type: Array of `AwsEc2LaunchTemplateDataNetworkInterfaceSetDetails (p. 759)` objects

Required: No

Placement

Specifies the placement of an instance.

Type: `AwsEc2LaunchTemplateDataPlacementDetails (p. 766)` object

Required: No

PrivateDnsNameOptions

The options for the instance hostname.

Type: `AwsEc2LaunchTemplateDataPrivateDnsNameOptionsDetails (p. 768)` object

Required: No

RamDiskId

The ID of the RAM disk.

Type: String

Pattern: `.\S.*`

Required: No

SecurityGroupIdSet

One or more security group IDs.

Type: Array of strings

Pattern: `.\S.*`

Required: No

SecurityGroupSet

One or more security group names. For a nondefault VPC, you must use security group IDs instead. You cannot specify both a security group ID and security name in the same request.

Type: Array of strings

Pattern: `.\S.*`

Required: No

UserData

The user data to make available to the instance.
Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2LaunchTemplateDataElasticGpuSpecificationSetDetails

Provides details about an Elastic Graphics specification for an Amazon EC2 launch template.

Contents

Type

The type of Elastic Graphics accelerator.

Type: String

Pattern: .\S. *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataElasticInferenceAcceleratorSetDetails**

Provides details for an Amazon Elastic Inference accelerator.

**Contents**

**Count**

The number of Elastic Inference accelerators to attach to the instance.

Type: Integer

Required: No

**Type**

The type of Elastic Inference accelerator.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](link)
- [AWS SDK for Go](link)
- [AWS SDK for Java V2](link)
- [AWS SDK for Ruby V3](link)
**AwsEc2LaunchTemplateDataEnclaveOptionsDetails**

Indicates whether the instance is enabled for AWS Nitro Enclaves.

**Contents**

**Enabled**

If this parameter is set to `true`, the instance is enabled for AWS Nitro Enclaves.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataHibernateOptionsDetails**

Specifies whether your Amazon EC2 instance is configured for hibernation.

**Contents**

**Configured**

If you set this parameter to `true`, the instance is enabled for hibernation.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataIamInstanceProfileDetails**

Provides details for an AWS Identity and Access Management (IAM) instance profile, which is a container for an IAM role for your instance.

**Contents**

**Arn**

The Amazon Resource Name (ARN) of the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**Name**

The name of the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataInstanceMarketOptionsDetails**

Provides details about the market (purchasing) option for an Amazon EC2 instance.

**Contents**

**MarketType**

The market type.

Type: String

Pattern: .\S.*

Required: No

**SpotOptions**

The options for Spot Instances.

Type: **AwsEc2LaunchTemplateDataInstanceMarketOptionsSpotOptionsDetails (p. 740)** object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataInstanceMarketOptionsSpotOptionsDetails**

Provides details about the market (purchasing) options for Spot Instances.

**Contents**

**BlockDurationMinutes**
- Deprecated.
- Type: Integer
- Required: No

**InstanceInterruptionBehavior**
- The behavior when a Spot Instance is interrupted.
- Type: String
- Pattern: .*\S.*
- Required: No

**MaxPrice**
- The maximum hourly price you're willing to pay for the Spot Instances.
- Type: String
- Pattern: .*\S.*
- Required: No

**SpotInstanceType**
- The Spot Instance request type.
- Type: String
- Pattern: .*\S.*
- Required: No

**ValidUntil**
- The end date of the request, in UTC format (YYYY-MM-DDTHH:MM:SSZ), for persistent requests.
- Type: String
- Pattern: .*\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateData Instance Requirements Accelerator Count Details**

The minimum and maximum number of accelerators (GPUs, FPGAs, or AWS Inferentia chips) on an Amazon EC2 instance.

**Contents**

**Max**

The maximum number of accelerators. If this parameter isn't specified, there's no maximum limit. To exclude accelerator-enabled instance types, set Max to 0.

Type: Integer

Required: No

**Min**

The minimum number of accelerators. If this parameter isn't specified, there's no minimum limit.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataInstanceRequirementsAcceleratorTotalMemoryMiBDetails**

The minimum and maximum amount of memory, in MiB, for the accelerators on an Amazon EC2 instance.

**Contents**

**Max**

The maximum amount of memory, in MiB. If this parameter isn't specified, there's no maximum limit.

Type: Integer

Required: No

**Min**

The minimum amount of memory, in MiB. If 0 is specified, there's no maximum limit.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataInstanceRequirementsBaselineEbsBandwidth**

The minimum and maximum baseline bandwidth to Amazon Elastic Block Store (Amazon EBS), in Mbps. For more information, see [Amazon EBS–optimized instances](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ebsoni-instance-placement.html) in the *Amazon EC2 User Guide*.

**Contents**

**Max**

The maximum baseline bandwidth, in Mbps. If this parameter is omitted, there's no maximum limit.

- Type: Integer
- Required: No

**Min**

The minimum baseline bandwidth, in Mbps. If this parameter is omitted, there's no minimum limit.

- Type: Integer
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/api-reference.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/api/aws/)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/java-sdk/v2/api/index.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/sdk-for-ruby/api/v3/)
**AwsEc2LaunchTemplateDataInstanceRequirementsDetails**

The attributes for the Amazon EC2 instance types.

**Contents**

**AcceleratorCount**

The minimum and maximum number of accelerators (GPUs, FPGAs, or AWS Inferentia chips) on an instance.

Type: *AwsEc2LaunchTemplateDataInstanceRequirementsAcceleratorCountDetails (p. 742)* object

Required: No

**AcceleratorManufacturers**

Indicates whether instance types must have accelerators by specific manufacturers.

Type: Array of strings

Pattern: .*\S.*

Required: No

**AcceleratorNames**

The accelerators that must be on the instance type.

Type: Array of strings

Pattern: .*\S.*

Required: No

**AcceleratorTotalMemoryMiB**

The minimum and maximum amount of total accelerator memory, in MiB.

Type: *AwsEc2LaunchTemplateDataInstanceRequirementsAcceleratorTotalMemoryMiBDetails (p. 743)* object

Required: No

**AcceleratorTypes**

The accelerator types that must be on the instance type.

Type: Array of strings

Pattern: .*\S.*

Required: No

**BareMetal**

Indicates whether bare metal instance types must be included, excluded, or required.

Type: String

Pattern: .*\S.*

Required: No
BaselineEbsBandwidthMbps

The minimum and maximum baseline bandwidth to Amazon EBS, in Mbps. For more information, see Amazon EBS optimized instances in the Amazon EC2 User Guide.

Type: `AwsEc2LaunchTemplateDataInstanceRequirementsBaselineEbsBandwidthMbpsDetails` object

Required: No

BurstablePerformance

Indicates whether burstable performance T instance types are included, excluded, or required. For more information, see Burstable performance instances in the Amazon EC2 User Guide.

Type: String

Pattern: `.*`\S.*`

Required: No

CpuManufacturers

The CPU manufacturers to include.

Type: Array of strings

Pattern: `.*`\S.*`

Required: No

ExcludedInstanceTypes

The instance types to exclude.

Type: Array of strings

Pattern: `.*`\S.*`

Required: No

InstanceGenerations

Indicates whether current or previous generation instance types are included.

Type: Array of strings

Pattern: `.*`\S.*`

Required: No

LocalStorage

Indicates whether instance types with instance store volumes are included, excluded, or required. For more information, see Amazon EC2 instance store in the Amazon EC2 User Guide.

Type: String

Pattern: `.*`\S.*`

Required: No

LocalStorageTypes

The type of local storage that is required.
Type: Array of strings
Pattern: . * \$ . *
Required: No

**MemoryGiBPerVCpu**

The minimum and maximum amount of memory per vCPU, in GiB.

Type: `AwsEc2LaunchTemplateDataInstanceRequirementsMemoryGiBPerVCpuDetails (p. 749)` object

Required: No

**MemoryMiB**

The minimum and maximum amount of memory, in MiB.

Type: `AwsEc2LaunchTemplateDataInstanceRequirementsMemoryMiBDetails (p. 750)` object

Required: No

**NetworkInterfaceCount**

The minimum and maximum number of network interfaces.

Type: `AwsEc2LaunchTemplateDataInstanceRequirementsNetworkInterfaceCountDetails (p. 751)` object

Required: No

**OnDemandMaxPricePercentageOverLowestPrice**

The price protection threshold for On-Demand Instances. This is the maximum you'll pay for an On-Demand Instance, expressed as a percentage above the least expensive current generation M, C, or R instance type with your specified attributes. When Amazon EC2 selects instance types with your attributes, it excludes instance types priced above your threshold.

The parameter accepts an integer, which Amazon EC2 interprets as a percentage.

A high value, such as 999999, turns off price protection.

Type: Integer

Required: No

**RequireHibernateSupport**

Indicates whether instance types must support hibernation for On-Demand Instances.

Type: Boolean

Required: No

**SpotMaxPricePercentageOverLowestPrice**

The price protection threshold for Spot Instances. This is the maximum you'll pay for a Spot Instance, expressed as a percentage above the least expensive current generation M, C, or R instance type with your specified attributes. When Amazon EC2 selects instance types with your attributes, it excludes instance types priced above your threshold.

The parameter accepts an integer, which Amazon EC2 interprets as a percentage.

A high value, such as 999999, turns off price protection.

Type: Integer
Required: No

**TotalLocalStorageGB**

The minimum and maximum amount of total local storage, in GB.

Type: [AwsEc2LaunchTemplateDataInstanceRequirementsTotalLocalStorageGBDetails](#) object

Required: No

**VCpuCount**

The minimum and maximum number of vCPUs.

Type: [AwsEc2LaunchTemplateDataInstanceRequirementsVCpuCountDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2LaunchTemplateDataInstanceRequirementsMemoryGiBPerVCpu

The minimum and maximum amount of memory per vCPU, in GiB.

Contents

Max

The maximum amount of memory per vCPU, in GiB. If this parameter is omitted, there's no maximum limit.

Type: Double

Required: No

Min

The minimum amount of memory per vCPU, in GiB. If this parameter is omitted, there's no maximum limit.

Type: Double

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataInstanceRequirementsMemoryMiBDetails**

The minimum and maximum amount of memory, in MiB, for an Amazon EC2 instance.

**Contents**

**Max**

The maximum amount of memory, in MiB.

Type: Integer

Required: No

**Min**

The minimum amount of memory, in MiB.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsEc2LaunchTemplateDataInstanceRequirementsNetworkInterfaceCount

The minimum and maximum number of network interfaces to be attached to an Amazon EC2 instance.

Contents

Max

The maximum number of network interfaces.

Type: Integer

Required: No

Min

The minimum number of network interfaces.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataInstanceRequirementsTotalLocalStorageGBDetails**

The minimum and maximum amount of total local storage, in GB, that an Amazon EC2 instance uses.

**Contents**

**Max**

The maximum amount of total local storage, in GB.

Type: Double

Required: No

**Min**

The minimum amount of total local storage, in GB.

Type: Double

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++]
- [AWS SDK for Go]
- [AWS SDK for Java V2]
- [AWS SDK for Ruby V3]
**AwsEc2LaunchTemplateDataInstanceRequirementsVcpuCountDetails**

The minimum and maximum number of vCPUs for an Amazon EC2 instance.

**Contents**

**Max**

The maximum number of vCPUs.

Type: Integer

Required: No

**Min**

The minimum number of vCPUs.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataLicenseSetDetails**

Provides details about the license configuration for an Amazon EC2 instance.

**Contents**

**LicenseConfigurationArn**

The Amazon Resource Name (ARN) of the license configuration.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataMaintenanceOptionsDetails**

The maintenance options of an Amazon EC2 instance.

**Contents**

**AutoRecovery**

Disables the automatic recovery behavior of your instance or sets it to default.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataMetadataOptionsDetails**

Specifies the metadata options for an Amazon EC2 instance.

**Contents**

**HttpEndpoint**

Enables or disables the HTTP metadata endpoint on your instances. If the parameter is not specified, the default state is enabled, and you won’t be able to access your instance metadata.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**HttpProtocolIpv6**

Enables or disables the IPv6 endpoint for the instance metadata service.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**HttpPutResponseHopLimit**

The desired HTTP PUT response hop limit for instance metadata requests. The larger the number, the further instance metadata requests can travel.

- **Type:** Integer
- **Required:** No

**HttpTokens**

The state of token usage for your instance metadata requests.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**InstanceMetadataTags**

When set to enabled, this parameter allows access to instance tags from the instance metadata. When set to disabled, it turns off access to instance tags from the instance metadata. For more information, see Work with instance tags in instance metadata in the Amazon EC2 User Guide.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataMonitoringDetails**

The monitoring for an Amazon EC2 instance.

**Contents**

**Enabled**

Enables detailed monitoring when `true` is specified. Otherwise, basic monitoring is enabled. For more information about detailed monitoring, see Enable or turn off detailed monitoring for your instances in the Amazon EC2 User Guide.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataNetworkInterfaceSetDetails**

One or more network interfaces to attach to an Amazon EC2 instance. If you specify a network interface, you must specify security groups and subnets as part of the network interface.

**Contents**

**AssociateCarrierIpAddress**

Indicates whether to associate a Carrier IP address with eth0 for a new network interface. You use this option when you launch an instance in a Wavelength Zone and want to associate a Carrier IP address with the network interface. For more information, see Carrier IP address in the AWS Wavelength Developer Guide.

Type: Boolean

Required: No

**AssociatePublicIpAddress**

Associates a public IPv4 address with eth0 for a new network interface.

Type: Boolean

Required: No

**DeleteOnTermination**

Indicates whether the network interface is deleted when the instance is terminated.

Type: Boolean

Required: No

**Description**

A description for the network interface.

Type: String

Pattern: .*\S.*

Required: No

**DeviceIndex**

The device index for the network interface attachment.

Type: Integer

Required: No

**Groups**

The IDs of one or more security groups.

Type: Array of strings

Pattern: .*\S.*

Required: No

**InterfaceType**

The type of network interface.
Type: String
Pattern: .*\S.*
Required: No

Ipv4PrefixCount

The number of IPv4 prefixes to be automatically assigned to the network interface. You cannot use this option if you use the Ipv4Prefixes option.

Type: Integer
Required: No

Ipv4Prefixes

One or more IPv4 prefixes to be assigned to the network interface. You cannot use this option if you use the Ipv4PrefixCount option.

Type: Array of AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv4PrefixesDetails (p. 762) objects
Required: No

Ipv6AddressCount

The number of IPv6 addresses to assign to a network interface. Amazon EC2 automatically selects the IPv6 addresses from the subnet range. You can't use this option if you use Ipv6Addresses.

Type: Integer
Required: No

Ipv6Addresses

One or more specific IPv6 addresses from the IPv6 CIDR block range of your subnet. You can't use this option if you use Ipv6AddressCount.

Type: Array of AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv6AddressesDetails (p. 763) objects
Required: No

Ipv6PrefixCount

The number of IPv6 prefixes to be automatically assigned to the network interface. You cannot use this option if you use the Ipv6Prefix option.

Type: Integer
Required: No

Ipv6Prefixes

One or more IPv6 prefixes to be assigned to the network interface. You cannot use this option if you use the Ipv6PrefixCount option.

Type: Array of AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv6PrefixesDetails (p. 764) objects
Required: No

NetworkCardIndex

The index of the network card. Some instance types support multiple network cards. The primary network interface must be assigned to network card index 0. The default is network card index 0.
Type: Integer
Required: No

**NetworkInterfaceId**

The ID of the network interface.

Type: String
Pattern: .\S+. *
Required: No

**PrivateIpAddress**

The primary private IPv4 address of the network interface.

Type: String
Pattern: .\S+. *
Required: No

**PrivateIpAddresses**

One or more private IPv4 addresses.

Type: Array of [AwsEc2LaunchTemplateDataNetworkInterfaceSetPrivateIpAddressesDetails (p. 765)] objects
Required: No

**SecondaryPrivateIpAddressCount**

The number of secondary private IPv4 addresses to assign to a network interface.

Type: Integer
Required: No

**SubnetId**

The ID of the subnet for the network interface.

Type: String
Pattern: .\S+. *
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv4PrefixesDetails**

Provides details on one or more IPv4 prefixes for a network interface.

**Contents**

**Ipv4Prefix**

The IPv4 prefix. For more information, see Assigning prefixes to Amazon EC2 network interfaces in the Amazon Elastic Compute Cloud User Guide.

- Type: String
- Pattern: .\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv6AddressesDetails**

Specifies an IPv6 address in an Amazon EC2 launch template.

**Contents**

**Ipv6Address**

One or more specific IPv6 addresses from the IPv6 CIDR block range of your subnet.

- **Type**: String
  - **Pattern**: .\S.*
  - **Required**: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDataNetworkInterfaceSetIpv6PrefixesDetails**

Provides details on one or more IPv6 prefixes to be assigned to the network interface.

**Contents**

**Ipv6Prefix**

The IPv6 prefix.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2LaunchTemplateDataNetworkInterfaceSetPrivatetIpAddressesDetails

One or more private IPv4 addresses.

Contents

Primary

Indicates whether the private IPv4 address is the primary private IPv4 address. Only one IPv4 address can be designated as primary.

Type: Boolean
Required: No

PrivatetIpAddress

The private IPv4 address.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataPlacementDetails**

Provides details about the placement of an Amazon EC2 instance.

**Contents**

**Affinity**

The affinity setting for an instance on an EC2 Dedicated Host.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**AvailabilityZone**

The Availability Zone for the instance.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**GroupName**

The name of the placement group for the instance.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**HostId**

The ID of the Dedicated Host for the instance.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**HostResourceGroupArn**

The Amazon Resource Name (ARN) of the host resource group in which to launch the instances.

- **Type**: String
- **Pattern**: .*\S.*
- **Required**: No

**PartitionNumber**

The number of the partition the instance should launch in.

- **Type**: Integer
- **Required**: No
SpreadDomain

Reserved for future use.

Type: String

Pattern: .*\S.*

Required: No

Tenancy

The tenancy of the instance (if the instance is running in a VPC). An instance with a tenancy of dedicated runs on single-tenant hardware.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2LaunchTemplateDataPrivateDnsNameOptionsDetails**

Describes the options for Amazon EC2 instance hostnames.

**Contents**

**EnableResourceNameDnsAAAARecord**

Indicates whether to respond to DNS queries for instance hostnames with DNS AAAA records.

Type: Boolean

Required: No

**EnableResourceNameDnsARecord**

Indicates whether to respond to DNS queries for instance hostnames with DNS A records.

Type: Boolean

Required: No

**HostnameType**

The type of hostname for EC2 instances.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2LaunchTemplateDetails**

Specifies the properties for creating an Amazon Elastic Compute Cloud (Amazon EC2) launch template.

**Contents**

**DefaultVersionNumber**

The default version of the launch template.

Type: Long

Required: No

**Id**

An ID for the launch template.

Type: String

Pattern: .*\S.*

Required: No

**LatestVersionNumber**

The latest version of the launch template.

Type: Long

Required: No

**LaunchTemplateData**

The information to include in the launch template.

Type: `AwsEc2LaunchTemplateDataDetails (p. 729)` object

Required: No

**LaunchTemplateName**

A name for the launch template.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsEc2NetworkAclAssociation

An association between the network ACL and a subnet.

Contents

NetworkAclAssociationId

The identifier of the association between the network ACL and the subnet.

Type: String
Pattern: .\S.*
Required: No

NetworkAclId

The identifier of the network ACL.

Type: String
Pattern: .\S.*
Required: No

SubnetId

The identifier of the subnet that is associated with the network ACL.

Type: String
Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2NetworkAclDetails**

Contains details about an Amazon EC2 network access control list (ACL).

**Contents**

**Associations**

Associations between the network ACL and subnets.

Type: Array of [AwsEc2NetworkAclAssociation (p. 770)] objects

Required: No

**Entries**

The set of rules in the network ACL.

Type: Array of [AwsEc2NetworkAclEntry (p. 773)] objects

Required: No

**IsDefault**

Whether this is the default network ACL for the VPC.

Type: Boolean

Required: No

**NetworkAclId**

The identifier of the network ACL.

Type: String

Pattern: .\S.*

Required: No

**OwnerId**

The identifier of the AWS account that owns the network ACL.

Type: String

Pattern: .\S.*

Required: No

**VpcId**

The identifier of the VPC for the network ACL.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEc2NetworkAclEntry**

A rule for the network ACL. Each rule allows or denies access based on the IP address, traffic direction, port, and protocol.

**Contents**

**CidrBlock**

The IPv4 network range for which to deny or allow access.

Type: String

Pattern: .*\S.*

Required: No

**Egress**

Whether the rule is an egress rule. An egress rule is a rule that applies to traffic that leaves the subnet.

Type: Boolean

Required: No

**IcmpTypeCode**

The Internet Control Message Protocol (ICMP) type and code for which to deny or allow access.

Type: [IcmpTypeCode][p. 456] object

Required: No

**Ipv6CidrBlock**

The IPv6 network range for which to deny or allow access.

Type: String

Pattern: .*\S.*

Required: No

**PortRange**

For TCP or UDP protocols, the range of ports that the rule applies to.

Type: [PortRangeFromTo][p. 776] object

Required: No

**Protocol**

The protocol that the rule applies to. To deny or allow access to all protocols, use the value -1.

Type: String

Pattern: .*\S.*

Required: No

**RuleAction**

Whether the rule is used to allow access or deny access.
Type: String
Pattern: . *\$ . *
Required: No

**RuleNumber**

The rule number. The rules are processed in order by their number.

Type: Integer
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
PortRange

A range of ports.

Contents

Begin

The first port in the port range.

Type: Integer

Required: No

End

The last port in the port range.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PortRangeFromTo

A range of ports.

Contents

From

The first port in the port range.

Type: Integer

Required: No

To

The last port in the port range.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2NetworkInterfaceAttachment**

Information about the network interface attachment.

**Contents**

**AttachmentId**

The identifier of the network interface attachment

Type: String

Pattern: .*\S.*

Required: No

**AttachTime**

Indicates when the attachment initiated.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**DeleteOnTermination**

Indicates whether the network interface is deleted when the instance is terminated.

Type: Boolean

Required: No

**DeviceIndex**

The device index of the network interface attachment on the instance.

Type: Integer

Required: No

**InstanceId**

The ID of the instance.

Type: String

Pattern: .*\S.*

Required: No

**InstanceOwnerId**

The AWS account ID of the owner of the instance.

Type: String

Pattern: .*\S.*

Required: No
**Status**

The attachment state.

Valid values: attaching | attached | detaching | detached

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2NetworkInterfaceDetails**

Details about the network interface

**Contents**

**Attachment**

The network interface attachment.

Type: *AwsEc2NetworkInterfaceAttachment (p. 777)* object

Required: No

**IpV6Addresses**

The IPv6 addresses associated with the network interface.

Type: Array of *AwsEc2NetworkInterfaceIpV6AddressDetail (p. 781)* objects

Required: No

**NetworkInterfaceId**

The ID of the network interface.

Type: String

Pattern: .*

Required: No

**PrivateIpAddresses**

The private IPv4 addresses associated with the network interface.

Type: Array of *AwsEc2NetworkInterfacePrivateIpAddressDetail (p. 782)* objects

Required: No

**PublicDnsName**

The public DNS name of the network interface.

Type: String

Pattern: .*

Required: No

**PublicIp**

The address of the Elastic IP address bound to the network interface.

Type: String

Pattern: .*

Required: No

**SecurityGroups**

Security groups for the network interface.

Type: Array of *AwsEc2NetworkInterfaceSecurityGroup (p. 783)* objects
Required: No

**SourceDestCheck**

Indicates whether traffic to or from the instance is validated.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2NetworkInterfaceIPv6AddressDetail

Provides information about an IPV6 address that is associated with the network interface.

Contents

IpV6Address

The IPV6 address.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2NetworkInterfacePrivateIpAddressDetail

Provides information about a private IPv4 address that is with the network interface.

Contents

PrivateDnsName

The private DNS name for the IP address.

Type: String

Pattern: .\S\.*

Required: No

PrivateIpAddress

The IP address.

Type: String

Pattern: .\S\.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2NetworkInterfaceSecurityGroup**

A security group associated with the network interface.

**Contents**

**GroupId**

The ID of the security group.

Type: String

Pattern: .*\S.*

Required: No

**GroupName**

The name of the security group.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2RouteTableDetails**

Provides details about a route table for the specified VPC.

**Contents**

**AssociationSet**

The associations between a route table and one or more subnets or a gateway.

Type: Array of *AssociationSetDetails (p. 789)* objects

Required: No

**OwnerId**

The ID of the AWS account that owns the route table.

Type: String

Pattern: .*

Required: No

**PropagatingVgwSet**

Describes a virtual private gateway propagating route.

Type: Array of *PropagatingVgwSetDetails (p. 792)* objects

Required: No

**RouteSet**

The routes in the route table.

Type: Array of *RouteSetDetails (p. 786)* objects

Required: No

**RouteTableId**

The ID of the route table.

Type: String

Pattern: .*

Required: No

**VpcId**

The ID of the virtual private cloud (VPC).

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
RouteSetDetails

Provides details about the routes in the route table.

Contents

CarrierGatewayId

The ID of the carrier gateway.

Type: String

Pattern: .*\S.*

Required: No

CoreNetworkArn

The Amazon Resource Name (ARN) of the core network.

Type: String

Pattern: .*\S.*

Required: No

DestinationCidrBlock

The IPv4 CIDR block used for the destination match.

Type: String

Pattern: .*\S.*

Required: No

DestinationIpv6CidrBlock

The IPv6 CIDR block used for the destination match.

Type: String

Pattern: .*\S.*

Required: No

DestinationPrefixListId

The prefix of the destination AWS service.

Type: String

Pattern: .*\S.*

Required: No

EgressOnlyInternetGatewayId

The ID of the egress-only internet gateway.

Type: String

Pattern: .*\S.*

Required: No
**GatewayId**

The ID of a gateway attached to your VPC.

Type: String

Pattern: .*

Required: No

**InstanceId**

The ID of a NAT instance in your VPC.

Type: String

Pattern: .*

Required: No

**InstanceOwnerId**

The ID of the AWS account that owns the instance.

Type: String

Pattern: .*

Required: No

**LocalGatewayId**

The ID of the local gateway.

Type: String

Pattern: .*

Required: No

**NatGatewayId**

The ID of a NAT gateway.

Type: String

Pattern: .*

Required: No

**NetworkInterfaceId**

The ID of the network interface.

Type: String

Pattern: .*

Required: No

**Origin**

Describes how the route was created.

Type: String

Pattern: .*
Required: No

**State**

The state of the route.

Type: String

Pattern: \.*\S.*

Required: No

**TransitGatewayId**

The ID of a transit gateway.

Type: String

Pattern: \.*\S.*

Required: No

**VpcPeeringConnectionId**

The ID of a VPC peering connection.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AssociationSetDetails

The associations between a route table and one or more subnets or a gateway.

Contents

AssociationState

The state of the association between a route table and a subnet or gateway.

Type: AssociationStateDetails (p. 791) object

Required: No

GatewayId

The ID of the internet gateway or virtual private gateway.

Type: String

Pattern: .\S.*

Required: No

Main

Indicates whether this is the main route table.

Type: Boolean

Required: No

RouteTableAssociationId

The ID of the association.

Type: String

Pattern: .\S.*

Required: No

RouteTableId

The ID of the route table.

Type: String

Pattern: .\S.*

Required: No

SubnetId

The ID of the subnet. A subnet ID is not returned for an implicit association.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AssociationStateDetails

Describes the state of an association between a route table and a subnet or gateway.

Contents

State

The state of the association.

Type: String

Pattern: .*[\s].*

Required: No

StatusMessage

The status message, if applicable.

Type: String

Pattern: .*[\s].*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PropagatingVgwSetDetails

Describes a virtual private gateway propagating route.

Contents

GatewayId

The ID of the virtual private gateway.

Type: String

Pattern: .\S. *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Details about an Amazon EC2 security group.

Contents

GroupId

The ID of the security group.

Type: String

Pattern: .\S.*

Required: No

GroupName

The name of the security group.

Type: String

Pattern: .\S.*

Required: No

IpPermissions

The inbound rules associated with the security group.

Type: Array of AwsEc2SecurityGroupIpPermission (p. 795) objects

Required: No

IpPermissionsEgress

[VPC only] The outbound rules associated with the security group.

Type: Array of AwsEc2SecurityGroupIpPermission (p. 795) objects

Required: No

OwnerId

The AWS account ID of the owner of the security group.

Type: String

Pattern: .\S.*

Required: No

VpcId

[VPC only] The ID of the VPC for the security group.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEc2SecurityGroupIpPermission**

An IP permission for an EC2 security group.

**Contents**

**FromPort**

The start of the port range for the TCP and UDP protocols, or an ICMP/ICMPv6 type number.

A value of -1 indicates all ICMP/ICMPv6 types. If you specify all ICMP/ICMPv6 types, you must specify all codes.

Type: Integer

Required: No

**IpProtocol**

The IP protocol name (tcp, udp, icmp, icmpv6) or number.

[VPC only] Use -1 to specify all protocols.

When authorizing security group rules, specifying -1 or a protocol number other than tcp, udp, icmp, or icmpv6 allows traffic on all ports, regardless of any port range you specify.

For tcp, udp, and icmp, you must specify a port range.

For icmpv6, the port range is optional. If you omit the port range, traffic for all types and codes is allowed.

Type: String

Pattern: .*\S.*

Required: No

**IpRanges**

The IPv4 ranges.

Type: Array of [p. 797] `AwsEc2SecurityGroupIpRange` objects

Required: No

**Ipv6Ranges**

The IPv6 ranges.

Type: Array of [p. 798] `AwsEc2SecurityGroupIpv6Range` objects

Required: No

**PrefixListIds**

[VPC only] The prefix list IDs for an AWS service. With outbound rules, this is the AWS service to access through a VPC endpoint from instances associated with the security group.

Type: Array of [p. 799] `AwsEc2SecurityGroupPrefixListId` objects

Required: No

**ToPort**

The end of the port range for the TCP and UDP protocols, or an ICMP/ICMPv6 code.
A value of -1 indicates all ICMP/ICMPv6 codes. If you specify all ICMP/ICMPv6 types, you must specify all codes.

Type: Integer
Required: No

UserIdGroupPairs

The security group and AWS account ID pairs.

Type: Array of `AwsEc2SecurityGroupUserIdGroupPair` objects
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2SecurityGroupIpRange**

A range of IPv4 addresses.

**Contents**

**CidrIp**

The IPv4 CIDR range. You can specify either a CIDR range or a source security group, but not both. To specify a single IPv4 address, use the /32 prefix length.

Type: String

Pattern: \.*\$.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2SecurityGroupIpv6Range**

A range of IPv6 addresses.

**Contents**

**CidrIpv6**

The IPv6 CIDR range. You can specify either a CIDR range or a source security group, but not both. To specify a single IPv6 address, use the /128 prefix length.

- Type: String
- Pattern: .*\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2SecurityGroupPrefixListId**

A prefix list ID.

**Contents**

**PrefixListId**

The ID of the prefix.

Type: String  

Pattern: .\S.*  

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)  
- [AWS SDK for Go](#)  
- [AWS SDK for Java V2](#)  
- [AWS SDK for Ruby V3](#)
**AwsEc2SecurityGroupUserIdGroupPair**

A relationship between a security group and a user.

**Contents**

**GroupId**

The ID of the security group.

Type: String

Pattern: .\S\.*

Required: No

**GroupName**

The name of the security group.

Type: String

Pattern: .\S\.*

Required: No

**PeeringStatus**

The status of a VPC peering connection, if applicable.

Type: String

Pattern: .\S\.*

Required: No

**UserId**

The ID of an AWS account.

For a referenced security group in another VPC, the account ID of the referenced security group is returned in the response. If the referenced security group is deleted, this value is not returned.

[EC2-Classic] Required when adding or removing rules that reference a security group in another VPC.

Type: String

Pattern: .\S\.*

Required: No

**VpcId**

The ID of the VPC for the referenced security group, if applicable.

Type: String

Pattern: .\S\.*

Required: No

**VpcPeeringConnectionId**

The ID of the VPC peering connection, if applicable.
Type: String

Pattern: .\S+.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2SubnetDetails**

Contains information about a subnet in Amazon EC2.

**Contents**

**AssignIpv6AddressOnCreation**

Whether to assign an IPV6 address to a network interface that is created in this subnet.

Type: Boolean

Required: No

**AvailabilityZone**

The Availability Zone for the subnet.

Type: String

Pattern: .\S.*

Required: No

**AvailabilityZoneId**

The identifier of the Availability Zone for the subnet.

Type: String

Pattern: .\S.*

Required: No

**AvailableIpAddressCount**

The number of available IPV4 addresses in the subnet. Does not include addresses for stopped instances.

Type: Integer

Required: No

**CidrBlock**

The IPV4 CIDR block that is assigned to the subnet.

Type: String

Pattern: .\S.*

Required: No

**DefaultForAz**

Whether this subnet is the default subnet for the Availability Zone.

Type: Boolean

Required: No

**Ipv6CidrBlockAssociationSet**

The IPV6 CIDR blocks that are associated with the subnet.

Type: Array of [Ipv6CidrBlockAssociation (p. 805)] objects
Required: No

**MapPublicIpOnLaunch**

Whether instances in this subnet receive a public IP address.

Type: Boolean

Required: No

**OwnerId**

The identifier of the AWS account that owns the subnet.

Type: String

Pattern: \.*\S.*

Required: No

**State**

The current state of the subnet. Valid values are available or pending.

Type: String

Pattern: \.*\S.*

Required: No

**SubnetArn**

The ARN of the subnet.

Type: String

Pattern: \.*\S.*

Required: No

**SubnetId**

The identifier of the subnet.

Type: String

Pattern: \.*\S.*

Required: No

**VpcId**

The identifier of the VPC that contains the subnet.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
Ipv6CidrBlockAssociation
An IPV6 CIDR block association.

Contents

AssociationId
The association ID for the IPv6 CIDR block.
Type: String
Pattern: .*\S.*
Required: No

CidrBlockState
Information about the state of the CIDR block. Valid values are as follows:
• associating
• associated
• disassociating
• disassociated
• failed
• failing
Type: String
Pattern: .*\S.*
Required: No

Ipv6CidrBlock
The IPv6 CIDR block.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AvailabilityZone

Information about an Availability Zone.

Contents

SubnetId

The ID of the subnet. You can specify one subnet per Availability Zone.

Type: String

Pattern: .*\S.*

Required: No

ZoneName

The name of the Availability Zone.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2TransitGatewayDetails**

Information about an AWS Amazon EC2 Transit Gateway that interconnects virtual private clouds (VPCs) and on-premises networks.

**Contents**

**AmazonSideAsn**

A private Autonomous System Number (ASN) for the Amazon side of a BGP session.

Type: Integer

Required: No

**AssociationDefaultRouteTableId**

The ID of the default association route table.

Type: String

Pattern: .*

Required: No

**AutoAcceptSharedAttachments**

Turn on or turn off automatic acceptance of attachment requests.

Type: String

Pattern: .*

Required: No

**DefaultRouteTableAssociation**

Turn on or turn off automatic association with the default association route table.

Type: String

Pattern: .*

Required: No

**DefaultRouteTablePropagation**

Turn on or turn off automatic propagation of routes to the default propagation route table.

Type: String

Pattern: .*

Required: No

**Description**

The description of the transit gateway.

Type: String

Pattern: .*

Required: No
DnsSupport
Turn on or turn off DNS support.
Type: String
Pattern: .\S.*
Required: No

Id
The ID of the transit gateway.
Type: String
Pattern: .\S.*
Required: No

MulticastSupport
Indicates whether multicast is supported on the transit gateway.
Type: String
Pattern: .\S.*
Required: No

PropagationDefaultRouteTableId
The ID of the default propagation route table.
Type: String
Pattern: .\S.*
Required: No

TransitGatewayCidrBlocks
The transit gateway Classless Inter-Domain Routing (CIDR) blocks.
Type: Array of strings
Pattern: .\S.*
Required: No

VpnEcmpSupport
Turn on or turn off Equal Cost Multipath Protocol (ECMP) support.
Type: String
Pattern: .\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEc2VolumeAttachment**

An attachment to an Amazon EC2 volume.

**Contents**

**AttachTime**

The datetime when the attachment initiated.

Type: String

Pattern: .*\S.*

Required: No

**DeleteOnTermination**

Whether the EBS volume is deleted when the EC2 instance is terminated.

Type: Boolean

Required: No

**InstanceId**

The identifier of the EC2 instance.

Type: String

Pattern: .*\S.*

Required: No

**Status**

The attachment state of the volume. Valid values are as follows:

- attaching
- attached
- busy
- detaching
- detached

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2VolumeDetails**

Details about an EC2 volume.

**Contents**

**Attachments**

The volume attachments.

Type: Array of `AwsEc2VolumeAttachment (p. 810)` objects

Required: No

**CreateTime**

Indicates when the volume was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**DeviceName**

The device name for the volume that is attached to the instance.

Type: String

Pattern: .*\S.*

Required: No

**Encrypted**

Specifies whether the volume is encrypted.

Type: Boolean

Required: No

**KmsKeyId**

The ARN of the AWS KMS key that was used to protect the volume encryption key for the volume.

Type: String

Pattern: .*\S.*

Required: No

**Size**

The size of the volume, in GiBs.

Type: Integer

Required: No
SnapshotId
The snapshot from which the volume was created.
Type: String
Pattern: .*\S.*
Required: No

Status
The volume state. Valid values are as follows:
• available
• creating
• deleted
• deleting
• error
• in-use
Type: String
Pattern: .*\S.*
Required: No

VolumeId
The ID of the volume.
Type: String
Pattern: .*\S.*
Required: No

VolumeScanStatus
Indicates whether the volume was scanned or skipped.
Type: String
Pattern: .*\S.*
Required: No

VolumeType
The volume type.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
awsEc2VpcDetails

Details about an EC2 VPC.

Contents

CidrBlockAssociationSet

Information about the IPv4 CIDR blocks associated with the VPC.

Type: Array of CidrBlockAssociation (p. 815) objects

Required: No

DhcpOptionsId

The identifier of the set of Dynamic Host Configuration Protocol (DHCP) options that are associated
with the VPC. If the default options are associated with the VPC, then this is default.

Type: String

Pattern: .[^\S].*

Required: No

Ipv6CidrBlockAssociationSet

Information about the IPv6 CIDR blocks associated with the VPC.

Type: Array of Ipv6CidrBlockAssociation (p. 805) objects

Required: No

State

The current state of the VPC. Valid values are available or pending.

Type: String

Pattern: .[^\S].*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CidrBlockAssociation

An IPv4 CIDR block association.

Contents

AssociationId

The association ID for the IPv4 CIDR block.

Type: String

Pattern: .*\S.*

Required: No

CidrBlock

The IPv4 CIDR block.

Type: String

Pattern: .*\S.*

Required: No

CidrBlockState

Information about the state of the IPv4 CIDR block.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsEc2VpcEndpointServiceDetails

Contains details about the service configuration for a VPC endpoint service.

Contents

AcceptanceRequired

Whether requests from other AWS accounts to create an endpoint to the service must first be accepted.

Type: Boolean

Required: No

AvailabilityZones

The Availability Zones where the service is available.

Type: Array of strings

Pattern: .*\S.*

Required: No

BaseEndpointDnsNames

The DNS names for the service.

Type: Array of strings

Pattern: .*\S.*

Required: No

GatewayLoadBalancerArns

The ARNs of the Gateway Load Balancers for the service.

Type: Array of strings

Pattern: .*\S.*

Required: No

ManagesVpcEndpoints

Whether the service manages its VPC endpoints.

Type: Boolean

Required: No

NetworkLoadBalancerArns

The ARNs of the Network Load Balancers for the service.

Type: Array of strings

Pattern: .*\S.*

Required: No

PrivateDnsName

The private DNS name for the service.
Type: String

Type: String

Required: No

ServiceId

The identifier of the service.

Type: String

Pattern: .*\S.*

Required: No

ServiceName

The name of the service.

Type: String

Pattern: .*\S.*

Required: No

ServiceState

The current state of the service. Valid values are as follows:

• Available
• Deleted
• Deleting
• Failed
• Pending

Type: String

Pattern: .*\S.*

Required: No

ServiceType

The types for the service.

The types for the service.

Type: Array of AwsEc2VpcEndpointServiceServiceTypeDetails (p. 818) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEc2VpcEndpointServiceServiceTypeDetails**

The service type information for a VPC endpoint service.

**Contents**

**ServiceType**

The type of service.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2VpcPeeringConnectionDetails**

Provides information about a VPC peering connection between two VPCs: a requester VPC that you own and an accepter VPC with which to create the connection.

**Contents**

**AccepterVpcInfo**

Information about the accepter VPC.

Type: `AwsEc2VpcPeeringConnectionVpcInfoDetails (p. 824)` object

Required: No

**ExpirationTime**

The time at which an unaccepted VPC peering connection will expire.

Type: String

Pattern: `.*\S.*`

Required: No

**RequesterVpcInfo**

Information about the requester VPC.

Type: `AwsEc2VpcPeeringConnectionVpcInfoDetails (p. 824)` object

Required: No

**Status**

The status of the VPC peering connection.

Type: `AwsEc2VpcPeeringConnectionStatusDetails (p. 823)` object

Required: No

**VpcPeeringConnectionId**

The ID of the VPC peering connection.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
VpcInfoCidrBlockSetDetails

Provides details about the IPv4 CIDR blocks for the VPC.

Contents

CidrBlock

The IPv4 CIDR block for the VPC.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
VpcInfoIpv6CidrBlockSetDetails

Provides details about the IPv6 CIDR blocks for the VPC.

Contents

Ipv6CidrBlock

The IPv6 CIDR block for the VPC.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
VpcInfoPeeringOptionsDetails
Provides information about the VPC peering connection options for the accepter or requester VPC.

Contents

AllowDnsResolutionFromRemoteVpc
Indicates whether a local VPC can resolve public DNS hostnames to private IP addresses when queried from instances in a peer VPC.
Type: Boolean
Required: No

AllowEgressFromLocalClassicLinkToRemoteVpc
Indicates whether a local ClassicLink connection can communicate with the peer VPC over the VPC peering connection.
Type: Boolean
Required: No

AllowEgressFromLocalVpcToRemoteClassicLink
Indicates whether a local VPC can communicate with a ClassicLink connection in the peer VPC over the VPC peering connection.
Type: Boolean
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2VpcPeeringConnectionStatusDetails**

Details about the status of the VPC peering connection.

**Contents**

**Code**

The status of the VPC peering connection.

Type: String

Pattern: .*

Required: No

**Message**

A message that provides more information about the status, if applicable.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2VpcPeeringConnectionVpcInfoDetails**

Describes a VPC in a VPC peering connection.

**Contents**

**CidrBlock**

The IPv4 CIDR block for the VPC.

Type: String
Pattern: .[^\S].*

Required: No

**CidrBlockSet**

Information about the IPv4 CIDR blocks for the VPC.

Type: Array of [VpcInfoCidrBlockSetDetails](#) objects

Required: No

**Ipv6CidrBlockSet**

The IPv6 CIDR block for the VPC.

Type: Array of [VpcInfoIpv6CidrBlockSetDetails](#) objects

Required: No

**OwnerId**

The ID of the AWS account that owns the VPC.

Type: String
Pattern: .[^\S].*

Required: No

**PeeringOptions**

Information about the VPC peering connection options for the accepter or requester VPC.

Type: [VpcInfoPeeringOptionsDetails](#) object

Required: No

**Region**

The AWS Region in which the VPC is located.

Type: String
Pattern: .[^\S].*

Required: No

**VpcId**

The ID of the VPC.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2VpnConnectionDetails**

Details about an Amazon EC2 VPN connection.

## Contents

### Category

The category of the VPN connection. **VPN** indicates an AWS VPN connection. **VPN-Classic** indicates an AWS Classic VPN connection.

- **Type:** String
- **Pattern:** .*
- **Required:** No

### CustomerGatewayConfiguration

The configuration information for the VPN connection's customer gateway, in the native XML format.

- **Type:** String
- **Pattern:** .*
- **Required:** No

### CustomerGatewayId

The identifier of the customer gateway that is at your end of the VPN connection.

- **Type:** String
- **Pattern:** .*
- **Required:** No

### Options

The VPN connection options.

- **Type:** [AwsEc2VpnConnectionOptionsDetails](p. 828) object
- **Required:** No

### Routes

The static routes that are associated with the VPN connection.

- **Type:** Array of [AwsEc2VpnConnectionRoutesDetails](p. 832) objects
- **Required:** No

### State

The current state of the VPN connection. Valid values are as follows:

- available
- deleted
- deleting
- pending

- **Type:** String
Pattern: .\S.*
Required: No

**TransitGatewayId**

The identifier of the transit gateway that is associated with the VPN connection.

Type: String
Pattern: .\S.*
Required: No

**Type**

The type of VPN connection.

Type: String
Pattern: .\S.*
Required: No

**VgwTelemetry**

Information about the VPN tunnel.

Type: Array of [AwsEc2VpnConnectionVgwTelemetryDetails (p. 833)] objects
Required: No

**VpnConnectionId**

The identifier of the VPN connection.

Type: String
Pattern: .\S.*
Required: No

**VpnGatewayId**

The identifier of the virtual private gateway that is at the AWS side of the VPN connection.

Type: String
Pattern: .\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEc2VpnConnectionOptionsDetails
VPN connection options.

Contents

StaticRoutesOnly
Whether the VPN connection uses static routes only.
Type: Boolean
Required: No

TunnelOptions
The VPN tunnel options.
Type: Array of AwsEc2VpnConnectionOptionsTunnelOptionsDetails (p. 829) objects
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEc2VpnConnectionOptionsTunnelOptionsDetails**

The VPN tunnel options.

**Contents**

*DpdTimeoutSeconds*

The number of seconds after which a Dead Peer Detection (DPD) timeout occurs.

Type: Integer

Required: No

*IkeVersions*

The Internet Key Exchange (IKE) versions that are permitted for the VPN tunnel.

Type: Array of strings

Pattern: \.*\S+.+

Required: No

*OutsideIpAddress*

The external IP address of the VPN tunnel.

Type: String

Pattern: \.*\S+.+

Required: No

*Phase1DhGroupNumbers*

The permitted Diffie-Hellman group numbers for the VPN tunnel for phase 1 IKE negotiations.

Type: Array of integers

Required: No

*Phase1EncryptionAlgorithms*

The permitted encryption algorithms for the VPN tunnel for phase 1 IKE negotiations.

Type: Array of strings

Pattern: \.*\S+.+

Required: No

*Phase1IntegrityAlgorithms*

The permitted integrity algorithms for the VPN tunnel for phase 1 IKE negotiations.

Type: Array of strings

Pattern: \.*\S+.+

Required: No

*Phase1LifetimeSeconds*

The lifetime for phase 1 of the IKE negotiation, in seconds.
Type: Integer
Required: No
**Phase2DhGroupNumbers**
The permitted Diffie-Hellman group numbers for the VPN tunnel for phase 2 IKE negotiations.
Type: Array of integers
Required: No
**Phase2EncryptionAlgorithms**
The permitted encryption algorithms for the VPN tunnel for phase 2 IKE negotiations.
Type: Array of strings
Pattern: .*\S.*
Required: No
**Phase2IntegrityAlgorithms**
The permitted integrity algorithms for the VPN tunnel for phase 2 IKE negotiations.
Type: Array of strings
Pattern: .*\S.*
Required: No
**Phase2LifetimeSeconds**
The lifetime for phase 2 of the IKE negotiation, in seconds.
Type: Integer
Required: No
**PreSharedKey**
The preshared key to establish initial authentication between the virtual private gateway and the customer gateway.
Type: String
Pattern: .*\S.*
Required: No
**RekeyFuzzPercentage**
The percentage of the rekey window, which is determined by RekeyMarginTimeSeconds during which the rekey time is randomly selected.
Type: Integer
Required: No
**RekeyMarginTimeSeconds**
The margin time, in seconds, before the phase 2 lifetime expires, during which the AWS side of the VPN connection performs an IKE rekey.
Type: Integer
Required: No

**ReplayWindowSize**

The number of packets in an IKE replay window.

Type: Integer

Required: No

**TunnelInsideCidr**

The range of inside IPv4 addresses for the tunnel.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsEc2VpnConnectionRoutesDetails**

A static routes associated with the VPN connection.

**Contents**

**DestinationCidrBlock**

The CIDR block associated with the local subnet of the customer data center.

- Type: String
- Pattern: .\S+.*
- Required: No

**State**

The current state of the static route.

- Type: String
- Pattern: .\S+.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEc2VpnConnectionVgwTelemetryDetails**

Information about the VPN tunnel.

**Contents**

**AcceptedRouteCount**

The number of accepted routes.

Type: Integer

Required: No

**CertificateArn**

The ARN of the VPN tunnel endpoint certificate.

Type: String

Pattern: .\S.*

Required: No

**LastStatusChange**

The date and time of the last change in status.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S.*

Required: No

**OutsideIpAddress**

The Internet-routable IP address of the virtual private gateway's outside interface.

Type: String

Pattern: .\S.*

Required: No

**Status**

The status of the VPN tunnel. Valid values are DOWN or UP.

Type: String

Pattern: .\S.*

Required: No

**StatusMessage**

If an error occurs, a description of the error.

Type: String

Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon EC2 Auto Scaling

Amazon EC2 Auto Scaling objects

- [AwsAutoScalingAutoScalingGroupAvailabilityZonesListDetails](p. 835)
- [AwsAutoScalingAutoScalingGroupDetails](p. 836)
- [AwsAutoScalingAutoScalingGroupLaunchTemplateLaunchTemplateSpecification](p. 838)
- [AwsAutoScalingAutoScalingGroupMixedInstancesPolicyDetails](p. 839)
- [AwsAutoScalingAutoScalingGroupMixedInstancesPolicyInstancesDistributionDetails](p. 840)
- [AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateDetails](p. 842)
- [AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateLaunchTemplateSpecification](p. 843)
- [AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateOverridesListDetails](p. 844)
- [AwsAutoScalingLaunchConfigurationBlockDeviceMappingsDetails](p. 845)
- [AwsAutoScalingLaunchConfigurationBlockDeviceMappingsEbsDetails](p. 846)
- [AwsAutoScalingLaunchConfigurationDetails](p. 848)
- [AwsAutoScalingLaunchConfigurationInstanceMonitoringDetails](p. 852)
- [AwsAutoScalingLaunchConfigurationMetadataOptions](p. 853)
**AwsAutoScalingAutoScalingGroupAvailabilityZonesListDetails**

An Availability Zone for the automatic scaling group.

**Contents**

**Value**

The name of the Availability Zone.

Type: String

Pattern: .\S. *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAutoScalingAutoScalingGroupDetails**

Provides details about an auto scaling group.

**Contents**

**AvailabilityZones**

The list of Availability Zones for the automatic scaling group.

Type: Array of `AwsAutoScalingAutoScalingGroupAvailabilityZonesListDetails` objects

Required: No

**CapacityRebalance**

Indicates whether capacity rebalancing is enabled.

Type: Boolean

Required: No

**CreatedTime**

Indicates when the auto scaling group was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String

Pattern: `.*\S.*`

Required: No

**HealthCheckGracePeriod**

The amount of time, in seconds, that Amazon EC2 Auto Scaling waits before it checks the health status of an EC2 instance that has come into service.

Type: Integer

Required: No

**HealthCheckType**

The service to use for the health checks. Valid values are EC2 or ELB.

Type: String

Pattern: `.*\S.*`

Required: No

**LaunchConfigurationName**

The name of the launch configuration.

Type: String

Pattern: `.*\S.*`

Required: No
LaunchTemplate

The launch template to use.

Type: `AwsAutoScalingAutoScalingGroupLaunchTemplateLaunchTemplateSpecification (p. 838)` object

Required: No

LoadBalancerNames

The list of load balancers associated with the group.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

MixedInstancesPolicy

The mixed instances policy for the automatic scaling group.

Type: `AwsAutoScalingAutoScalingGroupMixedInstancesPolicyDetails (p. 839)` object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Details about the launch template to use.

Contents

LaunchTemplateName

The identifier of the launch template. You must specify either LaunchTemplateId or LaunchTemplateName.

Type: String

Pattern: .\S.*

Required: No

LaunchTemplateId

The name of the launch template. You must specify either LaunchTemplateId or LaunchTemplateName.

Type: String

Pattern: .\S.*

Required: No

Version

Identifies the version of the launch template. You can specify a version identifier, or use the values $Latest or $Default.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAutoScalingAutoScalingGroupMixedInstancesPolicyDetails**

The mixed instances policy for the automatic scaling group.

**Contents**

**InstancesDistribution**

The instances distribution. The instances distribution specifies the distribution of On-Demand Instances and Spot Instances, the maximum price to pay for Spot Instances, and how the Auto Scaling group allocates instance types to fulfill On-Demand and Spot capacity.

Type: `AwsAutoScalingAutoScalingGroupMixedInstancesPolicyInstancesDistributionDetails` (p. 840) object

Required: No

**LaunchTemplate**

The launch template to use and the instance types (overrides) to use to provision EC2 instances to fulfill On-Demand and Spot capacities.

Type: `AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateDetails` (p. 842) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Information about the instances distribution.

Contents

**OnDemandAllocationStrategy**
How to allocate instance types to fulfill On-Demand capacity. The valid value is prioritized.

Type: String
Pattern: .*\S.*
Required: No

**OnDemandBaseCapacity**
The minimum amount of the Auto Scaling group's capacity that must be fulfilled by On-Demand Instances.

Type: Integer
Required: No

**OnDemandPercentageAboveBaseCapacity**
The percentage of On-Demand Instances and Spot Instances for additional capacity beyond OnDemandBaseCapacity.

Type: Integer
Required: No

**SpotAllocationStrategy**
How to allocate instances across Spot Instance pools. Valid values are as follows:

- lowest-price
- capacity-optimized
- capacity-optimized-prioritized

Type: String
Pattern: .*\S.*
Required: No

**SpotInstancePools**
The number of Spot Instance pools across which to allocate your Spot Instances.

Type: Integer
Required: No

**SpotMaxPrice**
The maximum price per unit hour that you are willing to pay for a Spot Instance.

Type: String
Pattern: .*\S.*
Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateDetails**

Describes a launch template and overrides for a mixed instances policy.

**Contents**

**LaunchTemplateSpecification**

The launch template to use for a mixed instances policy.

Type: 

*AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateLaunchTemplateSpecification (p. 843)* object

Required: No

**Overrides**

Property values to use to override the values in the launch template.

Type: Array of 

*AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateOverridesListDetails (p. 844)* objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateLaunchTemplateSpecification**

Details about the launch template to use for a mixed instances policy.

**Contents**

**LaunchTemplateId**

The identifier of the launch template. You must specify either LaunchTemplateId or LaunchTemplateName.

Type: String

Pattern: .\S.*

Required: No

**LaunchTemplateName**

The name of the launch template. You must specify either LaunchTemplateId or LaunchTemplateName.

Type: String

Pattern: .\S.*

Required: No

**Version**

Identifies the version of the launch template. You can specify a version identifier, or use the values $Latest or $Default.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAutoScalingAutoScalingGroupMixedInstancesPolicyLaunchTemplateOverridesListDetails**

Property values to use to override the values in the launch template.

**Contents**

**InstanceType**

The instance type. For example, `m3.xlarge`.

Type: String

Pattern: `.*\S.*`

Required: No

**WeightedCapacity**

The number of capacity units provided by the specified instance type in terms of virtual CPUs, memory, storage, throughput, or other relative performance characteristic.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)
**AwsAutoScalingLaunchConfigurationBlockDeviceMappingsDetails**

A block device for the instance.

**Contents**

**DeviceName**

The device name that is exposed to the EC2 instance. For example, /dev/sdh or xvdh.

Type: String

Pattern: .*\S.*

Required: No

**Ebs**

Parameters that are used to automatically set up Amazon EBS volumes when an instance is launched.

Type: `AwsAutoScalingLaunchConfigurationBlockDeviceMappingsEbsDetails` (p. 846) object

Required: No

**NoDevice**

Whether to suppress the device that is included in the block device mapping of the Amazon Machine Image (AMI).

If `NoDevice` is true, then you cannot specify Ebs.

Type: Boolean

Required: No

**VirtualName**

The name of the virtual device (for example, ephemeral0).

You can provide either `VirtualName` or `Ebs`, but not both.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAutoScalingLaunchConfigurationBlockDeviceMappingsEbsDetails**

Parameters that are used to automatically set up EBS volumes when an instance is launched.

**Contents**

**DeleteOnTermination**

Whether to delete the volume when the instance is terminated.

Type: Boolean

Required: No

**Encrypted**

Whether to encrypt the volume.

Type: Boolean

Required: No

**Iops**

The number of input/output (I/O) operations per second (IOPS) to provision for the volume.

Only supported for gp3 or io1 volumes. Required for io1 volumes. Not used with standard, gp2, st1, or sc1 volumes.

Type: Integer

Required: No

**SnapshotId**

The snapshot ID of the volume to use.

You must specify either VolumeSize or SnapshotId.

Type: String

Pattern: .*\S.*

Required: No

**VolumeSize**

The volume size, in GiBs. The following are the supported volumes sizes for each volume type:

- gp2 and gp3: 1-16,384
- io1: 4-16,384
- st1 and sc1: 125-16,384
- standard: 1-1,024

You must specify either SnapshotId or VolumeSize. If you specify both SnapshotId and VolumeSize, the volume size must be equal or greater than the size of the snapshot.

Type: Integer

Required: No

**VolumeType**

The volume type. Valid values are as follows:
- gp2
- gp3
- io1
- sc1
- st1
- standard

Type: String

Pattern: .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsAutoScalingLaunchConfigurationDetails**

Details about a launch configuration.

**Contents**

**AssociatePublicIpAddress**

For Auto Scaling groups that run in a VPC, specifies whether to assign a public IP address to the group's instances.

Type: Boolean

Required: No

**BlockDeviceMappings**

Specifies the block devices for the instance.

Type: Array of `AwsAutoScalingLaunchConfigurationBlockDeviceMappingsDetails` objects

Required: No

**ClassicLinkVpcId**

The identifier of a ClassicLink-enabled VPC that EC2-Classic instances are linked to.

Type: String

Pattern: `.*\S.*`

Required: No

**ClassicLinkVpcSecurityGroups**

The identifiers of one or more security groups for the VPC that is specified in ClassicLinkVPCId.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**CreatedTime**

The creation date and time for the launch configuration.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String

Pattern: `.*\S.*`

Required: No

**EbsOptimized**

Whether the launch configuration is optimized for Amazon EBS I/O.

Type: Boolean

Required: No
IamInstanceProfile
The name or the ARN of the instance profile associated with the IAM role for the instance. The
instance profile contains the IAM role.
   Type: String
   Pattern: .\S.*
   Required: No

ImageId
The identifier of the Amazon Machine Image (AMI) that is used to launch EC2 instances.
   Type: String
   Pattern: .\S.*
   Required: No

InstanceMonitoring
Indicates the type of monitoring for instances in the group.
   Type: AwsAutoScalingLaunchConfigurationInstanceMonitoringDetails (p. 852) object
   Required: No

InstanceType
The instance type for the instances.
   Type: String
   Pattern: .\S.*
   Required: No

KernelId
The identifier of the kernel associated with the AMI.
   Type: String
   Pattern: .\S.*
   Required: No

KeyName
The name of the key pair.
   Type: String
   Pattern: .\S.*
   Required: No

LaunchConfigurationName
The name of the launch configuration.
   Type: String
   Pattern: .\S.*
**Required:** No

**MetadataOptions**

The metadata options for the instances.

Type: [AwsAutoScalingLaunchConfigurationMetadataOptions](p. 853) object

**Required:** No

**PlacementTenancy**

The tenancy of the instance. An instance with dedicated tenancy runs on isolated, single-tenant hardware and can only be launched into a VPC.

Type: String

Pattern: .*\S.*

**Required:** No

**RamdiskId**

The identifier of the RAM disk associated with the AMI.

Type: String

Pattern: .*\S.*

**Required:** No

**SecurityGroups**

The security groups to assign to the instances in the Auto Scaling group.

Type: Array of strings

Pattern: .*\S.*

**Required:** No

**SpotPrice**

The maximum hourly price to be paid for any Spot Instance that is launched to fulfill the request.

Type: String

Pattern: .*\S.*

**Required:** No

**UserData**

The user data to make available to the launched EC2 instances. Must be base64-encoded text.

Type: String

Pattern: .*\S.*

**Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsAutoScalingLaunchConfigurationInstanceMonitoringDetails**

Information about the type of monitoring for instances in the group.

**Contents**

**Enabled**

If set to `true`, then instances in the group launch with detailed monitoring.

If set to `false`, then instances in the group launch with basic monitoring.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsAutoScalingLaunchConfigurationMetadataOptions**

The metadata options for the instances.

**Contents**

**HttpEndpoint**

Enables or disables the HTTP metadata endpoint on your instances. By default, the metadata endpoint is enabled.

Type: String

Pattern: .*\S.*

Required: No

**HttpPutResponseHopLimit**

The HTTP PUT response hop limit for instance metadata requests. The larger the number, the further instance metadata requests can travel.

Type: Integer

Required: No

**HttpTokens**

Indicates whether token usage is required or optional for metadata requests. By default, token usage is optional.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++]
- [AWS SDK for Go]
- [AWS SDK for Java V2]
- [AWS SDK for Ruby V3]

>  

**Amazon Elastic Container Registry (ECR)**

**Amazon Elastic Container Registry (ECR) objects**

- [AwsEcrContainerImageDetails (p. 854)]
- [AwsEcrRepositoryDetails (p. 856)]
- [AwsEcrRepositoryImageScanningConfigurationDetails (p. 858)]
- [AwsEcrRepositoryLifecyclePolicyDetails (p. 859)]
**AwsEcrContainerImageDetails**

Information about an Amazon ECR image.

**Contents**

**Architecture**

The architecture of the image. Valid values are as follows:

- `arm64`
- `i386`
- `x86_64`

Type: String

Pattern: `.\S.*`

Required: No

**ImageDigest**

The sha256 digest of the image manifest.

Type: String

Pattern: `.\S.*`

Required: No

**ImagePublishedAt**

The date and time when the image was pushed to the repository.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String

Pattern: `.\S.*`

Required: No

**ImageTags**

The list of tags that are associated with the image.

Type: Array of strings

Pattern: `.\S.*`

Required: No

**RegistryId**

The AWS account identifier that is associated with the registry that the image belongs to.

Type: String

Pattern: `.\S.*`

Required: No
RepositoryName

The name of the repository that the image belongs to.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AWS Security Hub API Reference
Amazon ECR objects

**AwsEcrRepositoryDetails**
Provides information about an Amazon Elastic Container Registry repository.

**Contents**

**Arn**
The ARN of the repository.
Type: String
Pattern: .*\S.*
Required: No

**ImageScanningConfiguration**
The image scanning configuration for a repository.
Type: [AwsEcrRepositoryImageScanningConfigurationDetails](p. 858) object
Required: No

**ImageTagMutability**
The tag mutability setting for the repository. Valid values are IMMUTABLE or MUTABLE.
Type: String
Pattern: .*\S.*
Required: No

**LifecyclePolicy**
Information about the lifecycle policy for the repository.
Type: [AwsEcrRepositoryLifecyclePolicyDetails](p. 859) object
Required: No

**RepositoryName**
The name of the repository.
Type: String
Pattern: .*\S.*
Required: No

**RepositoryPolicyText**
The text of the repository policy.
Type: String
Pattern: .*\S.*
Required: No

**See Also**
For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsEcrRepositoryImageScanningConfigurationDetails

The image scanning configuration for a repository.

Contents

ScanOnPush

Whether to scan images after they are pushed to a repository.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcrRepositoryLifecyclePolicyDetails**

Information about the lifecycle policy for the repository.

**Contents**

**LifecyclePolicyText**

The text of the lifecycle policy.

Type: String

Pattern: . *\S . *

Required: No

**RegistryId**

The AWS account identifier that is associated with the registry that contains the repository.

Type: String

Pattern: . *\S . *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Elastic Container Service (ECS) objects**

**Amazon Elastic Container Service (ECS) objects**

- AwsEcsClusterClusterSettingsDetails (p. 861)
- AwsEcsClusterConfigurationDetails (p. 862)
- AwsEcsClusterConfigurationExecuteCommandConfigurationDetails (p. 863)
- AwsEcsClusterConfigurationExecuteCommandConfigurationLogConfigurationDetails (p. 864)
- AwsEcsClusterDefaultCapacityProviderStrategyDetails (p. 865)
- AwsEcsClusterDetails (p. 866)
- AwsEcsContainerDetails (p. 868)
- AwsEcsServiceCapacityProviderStrategyDetails (p. 869)
- AwsEcsServiceDeploymentConfigurationDeploymentCircuitBreakerDetails (p. 870)
- AwsEcsServiceDeploymentConfigurationDetails (p. 871)
- AwsEcsServiceDeploymentControllerDetails (p. 872)
- AwsEcsServiceDetails (p. 873)
- AwsEcsServiceLoadBalancersDetails (p. 877)
- AwsEcsServiceNetworkConfigurationAwsVpcConfigurationDetails (p. 879)
• AwsEcsServiceNetworkConfigurationDetails (p. 880)
• AwsEcsServicePlacementConstraintsDetails (p. 881)
• AwsEcsServicePlacementStrategiesDetails (p. 882)
• AwsEcsServiceServiceRegistriesDetails (p. 883)
• AwsEcsTaskDefinitionContainerDefinitionsDependsOnDetails (p. 885)
• AwsEcsTaskDefinitionContainerDefinitionsDetails (p. 886)
• AwsEcsTaskDefinitionContainerDefinitionsEnvironmentDetails (p. 892)
• AwsEcsTaskDefinitionContainerDefinitionsEnvironmentFilesDetails (p. 893)
• AwsEcsTaskDefinitionContainerDefinitionsExtraHostsDetails (p. 894)
• AwsEcsTaskDefinitionContainerDefinitionsFirelensConfigurationDetails (p. 895)
• AwsEcsTaskDefinitionContainerDefinitionsHealthCheckDetails (p. 896)
• AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersCapabilitiesDetails (p. 897)
• AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersDetails (p. 898)
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• AwsEcsTaskDefinitionContainerDefinitionsRepositoryCredentialsDetails (p. 907)
• AwsEcsTaskDefinitionContainerDefinitionsResourceRequirementsDetails (p. 908)
• AwsEcsTaskDefinitionContainerDefinitionsSecretsDetails (p. 909)
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• AwsEcsTaskDefinitionContainerDefinitionsUlimitsDetails (p. 911)
• AwsEcsTaskDefinitionContainerDefinitionsVolumesFromDetails (p. 913)
• AwsEcsTaskDefinitionDetails (p. 914)
• AwsEcsTaskDefinitionInferenceAcceleratorsDetails (p. 917)
• AwsEcsTaskDefinitionPlacementConstraintsDetails (p. 918)
• AwsEcsTaskDefinitionProxyConfigurationDetails (p. 919)
• AwsEcsTaskDefinitionProxyConfigurationProxyConfigurationPropertiesDetails (p. 920)
• AwsEcsTaskDefinitionVolumesDetails (p. 921)
• AwsEcsTaskDefinitionVolumesDockerVolumeConfigurationDetails (p. 922)
• AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationAuthorizationConfigDetails (p. 924)
• AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationDetails (p. 925)
• AwsEcsTaskDefinitionVolumesHostDetails (p. 927)
• AwsEcsTaskDetails (p. 928)
• AwsEcsTaskVolumeDetails (p. 930)
• AwsEcsTaskVolumeHostDetails (p. 931)
• AwsMountPoint (p. 932)
**AwsEcsClusterClusterSettingsDetails**

Indicates whether to enable CloudWatch Container Insights for the ECS cluster.

**Contents**

**Name**

The name of the setting. The valid value is `containerInsights`.

Type: String

Pattern: `.\S.*`

Required: No

**Value**

The value of the setting. Valid values are `disabled` or `enabled`.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsClusterConfigurationDetails**

The run command configuration for the cluster.

**Contents**

**ExecuteCommandConfiguration**

Contains the run command configuration for the cluster.

Type: [AwsEcsClusterConfigurationExecuteCommandConfigurationDetails](p. 863) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsClusterConfigurationExecuteCommandConfigurationDetails**

Contains the run command configuration for the cluster.

**Contents**

**KmsKeyId**

The identifier of the KMS key that is used to encrypt the data between the local client and the container.

Type: String

Pattern: .\S.*

Required: No

**LogConfiguration**

The log configuration for the results of the run command actions. Required if Logging is NONE.

Type: `AwsEcsClusterConfigurationExecuteCommandConfigurationLogConfigurationDetails` (p. 864) object

Required: No

**Logging**

The log setting to use for redirecting logs for run command results.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEcsClusterConfigurationExecuteCommandConfigurationLogConfigurationDetails

The log configuration for the results of the run command actions.

Contents

CloudWatchEncryptionEnabled

Whether to enable encryption on the CloudWatch logs.

Type: Boolean
Required: No

CloudWatchLogGroupName

The name of the CloudWatch log group to send the logs to.

Type: String
Pattern: .
Required: No

S3BucketName

The name of the S3 bucket to send logs to.

Type: String
Pattern: .
Required: No

S3EncryptionEnabled

Whether to encrypt the logs that are sent to the S3 bucket.

Type: Boolean
Required: No

S3KeyPrefix

Identifies the folder in the S3 bucket to send the logs to.

Type: String
Pattern: .
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsClusterDefaultCapacityProviderStrategyDetails**

The default capacity provider strategy for the cluster. The default capacity provider strategy is used when services or tasks are run without a specified launch type or capacity provider strategy.

**Contents**

**Base**

The minimum number of tasks to run on the specified capacity provider.

- **Type:** Integer
- **Required:** No

**CapacityProvider**

The name of the capacity provider.

- **Type:** String
- **Pattern:** .[^\s\.*]
- **Required:** No

**Weight**

The relative percentage of the total number of tasks launched that should use the capacity provider.

- **Type:** Integer
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsClusterDetails**

Provides details about an Amazon ECS cluster.

**Contents**

**ActiveServicesCount**

The number of services that are running on the cluster in an ACTIVE state. You can view these services with the Amazon ECS ListServices API operation.

Type: Integer

Required: No

**CapacityProviders**

The short name of one or more capacity providers to associate with the cluster.

Type: Array of strings

Pattern: .\S. *

Required: No

**ClusterArn**

The Amazon Resource Name (ARN) that identifies the cluster.

Type: String

Pattern: .\S. *

Required: No

**ClusterName**

A name that you use to identify your cluster.

Type: String

Pattern: .\S. *

Required: No

**ClusterSettings**

The setting to use to create the cluster. Specifically used to configure whether to enable CloudWatch Container Insights for the cluster.

Type: Array of AwsEcsClusterClusterSettingsDetails (p. 861) objects

Required: No

**Configuration**

The run command configuration for the cluster.

Type: AwsEcsClusterConfigurationDetails (p. 862) object

Required: No

**DefaultCapacityProviderStrategy**

The default capacity provider strategy for the cluster. The default capacity provider strategy is used when services or tasks are run without a specified launch type or capacity provider strategy.
Type: Array of [AwsEcsClusterDefaultCapacityProviderStrategyDetails (p. 865)] objects

Required: No

**RegisteredContainerInstancesCount**

The number of container instances registered into the cluster. This includes container instances in both ACTIVE and DRAINING status.

Type: Integer

Required: No

**RunningTasksCount**

The number of tasks in the cluster that are in the RUNNING state.

Type: Integer

Required: No

**Status**

The status of the cluster.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsContainerDetails**

Provides information about an Amazon ECS container.

**Contents**

**Image**

The image used for the container.

Type: String

Pattern: .*\S.*

Required: No

**MountPoints**

The mount points for data volumes in your container.

Type: Array of *AwsMountPoint (p. 932)* objects

Required: No

**Name**

The name of the container.

Type: String

Pattern: .*\S.*

Required: No

**Privileged**

When this parameter is true, the container is given elevated privileges on the host container instance (similar to the root user).

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsServiceCapacityProviderStrategyDetails**

Strategy item for the capacity provider strategy that the service uses.

**Contents**

**Base**

The minimum number of tasks to run on the capacity provider. Only one strategy item can specify a value for `Base`.

The value must be between 0 and 100000.

Type: Integer

Required: No

**CapacityProvider**

The short name of the capacity provider.

Type: String

Pattern: `.*\S.*`

Required: No

**Weight**

The relative percentage of the total number of tasks that should use the capacity provider.

If no weight is specified, the default value is 0. At least one capacity provider must have a weight greater than 0.

The value can be between 0 and 1000.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsServiceDeploymentConfigurationDeploymentCircuitBreakerDetails**

Determines whether a service deployment fails if a service cannot reach a steady state.

**Contents**

**Enable**

Whether to enable the deployment circuit breaker logic for the service.

Type: Boolean

Required: No

**Rollback**

Whether to roll back the service if a service deployment fails. If rollback is enabled, when a service deployment fails, the service is rolled back to the last deployment that completed successfully.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsServiceDeploymentConfigurationDetails**

Optional deployment parameters for the service.

**Contents**

**DeploymentCircuitBreaker**

Determines whether a service deployment fails if a service cannot reach a steady state.

Type: `AwsEcsServiceDeploymentConfigurationDeploymentCircuitBreakerDetails (p. 870)` object

Required: No

**MaximumPercent**

For a service that uses the rolling update (ECS) deployment type, the maximum number of tasks in a service that are allowed in the RUNNING or PENDING state during a deployment, and for tasks that use the EC2 launch type, when any container instances are in the DRAINING state. Provided as a percentage of the desired number of tasks. The default value is 200%.

For a service that uses the blue/green (CODE_DEPLOY) or EXTERNAL deployment types, and tasks that use the EC2 launch type, the maximum number of tasks in the service that remain in the RUNNING state while the container instances are in the DRAINING state.

For the Fargate launch type, the maximum percent value is not used.

Type: Integer

Required: No

**MinimumHealthyPercent**

For a service that uses the rolling update (ECS) deployment type, the minimum number of tasks in a service that must remain in the RUNNING state during a deployment, and while any container instances are in the DRAINING state if the service contains tasks using the EC2 launch type. Expressed as a percentage of the desired number of tasks. The default value is 100%.

For a service that uses the blue/green (CODE_DEPLOY) or EXTERNAL deployment types and tasks that use the EC2 launch type, the minimum number of the tasks in the service that remain in the RUNNING state while the container instances are in the DRAINING state.

For the Fargate launch type, the minimum healthy percent value is not used.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsServiceDeploymentControllerDetails**

Information about the deployment controller type that the service uses.

**Contents**

**Type**

The rolling update (ECS) deployment type replaces the current running version of the container with the latest version.

The blue/green (CODE_DEPLOY) deployment type uses the blue/green deployment model that is powered by AWS CodeDeploy. This deployment model a new deployment of a service can be verified before production traffic is sent to it.

The external (EXTERNAL) deployment type allows the use of any third-party deployment controller for full control over the deployment process for an Amazon ECS service.

Valid values: ECS | CODE_DEPLOY | EXTERNAL

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-golang/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)
**AwsEcsServiceDetails**

Provides details about a service within an ECS cluster.

**Contents**

**CapacityProviderStrategy**

The capacity provider strategy that the service uses.

Type: Array of [AwsEcsServiceCapacityProviderStrategyDetails (p. 869)](p. 869) objects

Required: No

**Cluster**

The ARN of the cluster that hosts the service.

Type: String

Pattern: \.*\S.*

Required: No

**DeploymentConfiguration**

Deployment parameters for the service. Includes the number of tasks that run and the order in which to start and stop tasks.

Type: [AwsEcsServiceDeploymentConfigurationDetails (p. 871)](p. 871) object

Required: No

**DeploymentController**

Contains the deployment controller type that the service uses.

Type: [AwsEcsServiceDeploymentControllerDetails (p. 872)](p. 872) object

Required: No

**DesiredCount**

The number of instantiations of the task definition to run on the service.

Type: Integer

Required: No

**EnableEcsManagedTags**

Whether to enable Amazon ECS managed tags for the tasks in the service.

Type: Boolean

Required: No

**EnableExecuteCommand**

Whether the execute command functionality is enabled for the service.

Type: Boolean

Required: No
**HealthCheckGracePeriodSeconds**

After a task starts, the amount of time in seconds that the Amazon ECS service scheduler ignores unhealthy Elastic Load Balancing target health checks.

Type: Integer

Required: No

**LaunchType**

The launch type that the service uses.

Valid values: EC2 | FARGATE | EXTERNAL

Type: String

Pattern: .\S.*

Required: No

**LoadBalancers**

Information about the load balancers that the service uses.

Type: Array of `AwsEcsServiceLoadBalancersDetails` objects

Required: No

**Name**

The name of the service.

Type: String

Pattern: .\S.*

Required: No

**NetworkConfiguration**

For tasks that use the awsvpc networking mode, the VPC subnet and security group configuration.

Type: `AwsEcsServiceNetworkConfigurationDetails` object

Required: No

**PlacementConstraints**

The placement constraints for the tasks in the service.

Type: Array of `AwsEcsServicePlacementConstraintsDetails` objects

Required: No

**PlacementStrategies**

Information about how tasks for the service are placed.

Type: Array of `AwsEcsServicePlacementStrategiesDetails` objects

Required: No

**PlatformVersion**

The platform version on which to run the service. Only specified for tasks that are hosted on AWS Fargate. If a platform version is not specified, the LATEST platform version is used by default.
PropagateTags
Indicates whether to propagate the tags from the task definition to the task or from the service to the task. If no value is provided, then tags are not propagated.
Valid values: TASK_DEFINITION | SERVICE

Role
The ARN of the IAM role that is associated with the service. The role allows the Amazon ECS container agent to register container instances with an Elastic Load Balancing load balancer.

SchedulingStrategy
The scheduling strategy to use for the service.

ServiceArn
The ARN of the service.

ServiceName
The name of the service.
The name can contain up to 255 characters. It can use letters, numbers, underscores, and hyphens.

Type: String

Pattern: .\S.*

Required: No

**ServiceRegistries**

Information about the service discovery registries to assign to the service.

Type: Array of [AwsEcsServiceServiceRegistriesDetails](p. 883) objects

Required: No

**TaskDefinition**

The task definition to use for tasks in the service.

Type: String

Pattern: .\S.*

Required: No

---

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsServiceLoadBalancersDetails**

Information about a load balancer that the service uses.

**Contents**

**ContainerName**

The name of the container to associate with the load balancer.

Type: String

Pattern: .*

Required: No

**ContainerPort**

The port on the container to associate with the load balancer. This port must correspond to a containerPort in the task definition the tasks in the service are using. For tasks that use the EC2 launch type, the container instance they are launched on must allow ingress traffic on the hostPort of the port mapping.

Type: Integer

Required: No

**LoadBalancerName**

The name of the load balancer to associate with the Amazon ECS service or task set.

Only specified when using a Classic Load Balancer. For an Application Load Balancer or a Network Load Balancer, the load balancer name is omitted.

Type: String

Pattern: .*

Required: No

**TargetGroupArn**

The ARN of the Elastic Load Balancing target group or groups associated with a service or task set.

Only specified when using an Application Load Balancer or a Network Load Balancer. For a Classic Load Balancer, the target group ARN is omitted.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsEcsServiceNetworkConfigurationAwsVpcConfigurationDetails**

For tasks that use the awsvpc networking mode, the VPC subnet and security group configuration.

**Contents**

**AssignPublicIp**

Whether the task's elastic network interface receives a public IP address. The default value is DISABLED.

Valid values: ENABLED | DISABLED

Type: String

Pattern: .*\S.*

Required: No

**SecurityGroups**

The IDs of the security groups associated with the task or service.

You can provide up to five security groups.

Type: Array of strings

Pattern: .*\S.*

Required: No

**Subnets**

The IDs of the subnets associated with the task or service.

You can provide up to 16 subnets.

Type: Array of strings

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsServiceNetworkConfigurationDetails**

For tasks that use the `awsvpc` networking mode, the VPC subnet and security group configuration.

**Contents**

**AwsVpcConfiguration**

The VPC subnet and security group configuration.

Type: [AwsEcsServiceNetworkConfigurationAwsVpcConfigurationDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsServicePlacementConstraintsDetails**

A placement constraint for the tasks in the service.

**Contents**

**Expression**

A cluster query language expression to apply to the constraint. You cannot specify an expression if the constraint type is `distinctInstance`.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Type**

The type of constraint. Use `distinctInstance` to run each task in a particular group on a different container instance. Use `memberOf` to restrict the selection to a group of valid candidates.

- **Valid values:** `distinctInstance` | `memberOf`
- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws-sdk_cpp.github.io/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws-sdk-java.github.io/)
- [AWS SDK for Ruby V3](https://github.com/aws/aws-sdk-ruby)
**AwsEcsServicePlacementStrategiesDetails**

A placement strategy that determines how to place the tasks for the service.

**Contents**

**Field**

The field to apply the placement strategy against.

For the spread placement strategy, valid values are instanceId (or host, which has the same effect), or any platform or custom attribute that is applied to a container instance, such as attribute:ecs.availability-zone.

For the binpack placement strategy, valid values are cpu and memory.

For the random placement strategy, this attribute is not used.

Type: String

Pattern: .\S.*

Required: No

**Type**

The type of placement strategy.

The random placement strategy randomly places tasks on available candidates.

The spread placement strategy spreads placement across available candidates evenly based on the value of Field.

The binpack strategy places tasks on available candidates that have the least available amount of the resource that is specified in Field.

Valid values: random | spread | binpack

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsServiceServiceRegistriesDetails**

Information about a service discovery registry to assign to the service.

**Contents**

**ContainerName**

The container name value to use for the service discovery service.

If the task definition uses the `bridge` or `host` network mode, you must specify `ContainerName` and `ContainerPort`.

If the task definition uses the `awsvpc` network mode and a type SRV DNS record, you must specify either `ContainerName` and `ContainerPort`, or `Port`, but not both.

Type: String

Pattern: `.*\S.*`

Required: No

**ContainerPort**

The port value to use for the service discovery service.

If the task definition uses the `bridge` or `host` network mode, you must specify `ContainerName` and `ContainerPort`.

If the task definition uses the `awsvpc` network mode and a type SRV DNS record, you must specify either `ContainerName` and `ContainerPort`, or `Port`, but not both.

Type: Integer

Required: No

**Port**

The port value to use for a service discovery service that specifies an SRV record. This field can be used if both the `awsvpcawsvpc` network mode and SRV records are used.

Type: Integer

Required: No

**RegistryArn**

The ARN of the service registry.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionContainerDefinitionsDependsOnDetails**

A dependency that is defined for container startup and shutdown.

**Contents**

**Condition**

The dependency condition of the dependent container. Indicates the required status of the dependent container before the current container can start. Valid values are as follows:

- COMPLETE
- HEALTHY
- SUCCESS
- START

Type: String

Pattern: .*\S.*

Required: No

**ContainerName**

The name of the dependent container.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsDetails**

A container definition that describes a container in the task.

**Contents**

**Command**

The command that is passed to the container.

Type: Array of strings

Pattern: .\S.*

Required: No

**Cpu**

The number of CPU units reserved for the container.

Type: Integer

Required: No

**DependsOn**

The dependencies that are defined for container startup and shutdown.

Type: Array of **AwsEcsTaskDefinitionContainerDefinitionsDependsOnDetails** (p. 885) objects

Required: No

**DisableNetworking**

Whether to disable networking within the container.

Type: Boolean

Required: No

**DnsSearchDomains**

A list of DNS search domains that are presented to the container.

Type: Array of strings

Pattern: .\S.*

Required: No

**DnsServers**

A list of DNS servers that are presented to the container.

Type: Array of strings

Pattern: .\S.*

Required: No

**DockerLabels**

A key-value map of labels to add to the container.

Type: String to string map
Key Pattern: .\S.*
Value Pattern: .\S.*
Required: No

**DockerSecurityOptions**

A list of strings to provide custom labels for SELinux and AppArmor multi-level security systems.
Type: Array of strings
Pattern: .\S.*
Required: No

**EntryPoint**

The entry point that is passed to the container.
Type: Array of strings
Pattern: .\S.*
Required: No

**Environment**

The environment variables to pass to a container.
Type: Array of [AwsEcsTaskDefinitionContainerDefinitionsEnvironmentDetails](#) objects
Required: No

**EnvironmentFiles**

A list of files containing the environment variables to pass to a container.
Type: Array of [AwsEcsTaskDefinitionContainerDefinitionsEnvironmentFilesDetails](#) objects
Required: No

**Essential**

Whether the container is essential. All tasks must have at least one essential container.
Type: Boolean
Required: No

**ExtraHosts**

A list of hostnames and IP address mappings to append to the `/etc/hosts` file on the container.
Type: Array of [AwsEcsTaskDefinitionContainerDefinitionsExtraHostsDetails](#) objects
Required: No

**FirelensConfiguration**

The FireLens configuration for the container. Specifies and configures a log router for container logs.
Type: [AwsEcsTaskDefinitionContainerDefinitionsFirelensConfigurationDetails](#) object
Required: No

**HealthCheck**

The container health check command and associated configuration parameters for the container.
Type: `AwsEcsTaskDefinitionContainerDefinitionsHealthCheckDetails (p. 896)` object

Required: No

**Hostname**

The hostname to use for the container.

Type: String

Pattern: `.*\S.*`

Required: No

**Image**

The image used to start the container.

Type: String

Pattern: `.*\S.*`

Required: No

**Interactive**

If set to true, then containerized applications can be deployed that require stdin or a tty to be allocated.

Type: Boolean

Required: No

**Links**

A list of links for the container in the form `container_name:alias`. Allows containers to communicate with each other without the need for port mappings.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**LinuxParameters**

Linux-specific modifications that are applied to the container, such as Linux kernel capabilities.

Type: `AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersDetails (p. 898)` object

Required: No

**LogConfiguration**

The log configuration specification for the container.

Type: `AwsEcsTaskDefinitionContainerDefinitionsLogConfigurationDetails (p. 902)` object

Required: No

**Memory**

The amount (in MiB) of memory to present to the container. If the container attempts to exceed the memory specified here, the container is shut down. The total amount of memory reserved for all containers within a task must be lower than the task memory value, if one is specified.

Type: Integer
Required: No

**MemoryReservation**

The soft limit (in MiB) of memory to reserve for the container.

Type: Integer

Required: No

**MountPoints**

The mount points for the data volumes in the container.

Type: Array of [AWS EcsTaskDefinitionContainerDefinitionsMountPointsDetails](p. 905) objects

Required: No

**Name**

The name of the container.

Type: String

Pattern: .*\S.*

Required: No

**PortMappings**

The list of port mappings for the container.

Type: Array of [AWS EcsTaskDefinitionContainerDefinitionsPortMappingsDetails](p. 906) objects

Required: No

**Privileged**

Whether the container is given elevated privileges on the host container instance. The elevated privileges are similar to the root user.

Type: Boolean

Required: No

**PseudoTerminal**

Whether to allocate a TTY to the container.

Type: Boolean

Required: No

**ReadOnlyRootFilesystem**

Whether the container is given read-only access to its root file system.

Type: Boolean

Required: No

**RepositoryCredentials**

The private repository authentication credentials to use.

Type: [AWS EcsTaskDefinitionContainerDefinitionsRepositoryCredentialsDetails](p. 907) object

Required: No
ResourceRequirements

The type and amount of a resource to assign to a container. The only supported resource is a GPU.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsResourceRequirementsDetails (p. 908) objects

Required: No

Secrets

The secrets to pass to the container.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsSecretsDetails (p. 909) objects

Required: No

StartTimeout

The number of seconds to wait before giving up on resolving dependencies for a container.

Type: Integer

Required: No

StopTimeout

The number of seconds to wait before the container is stopped if it doesn't shut down normally on its own.

Type: Integer

Required: No

SystemControls

A list of namespaced kernel parameters to set in the container.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsSystemControlsDetails (p. 910) objects

Required: No

Ulimits

A list of ulimits to set in the container.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsUlimitsDetails (p. 911) objects

Required: No

User

The user to use inside the container.

The value can use one of the following formats.

- user
- user : group
- uid
- uid : gid
- user : gid
- uid : group

Type: String
VolumesFrom

Data volumes to mount from another container.

Type: Array of \texttt{AwsEcsTaskDefinitionContainerDefinitionsVolumesFromDetails (p. 913)} objects

Required: No

WorkingDirectory

The working directory in which to run commands inside the container.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- \texttt{AWS SDK for C++}
- \texttt{AWS SDK for Go}
- \texttt{AWS SDK for Java V2}
- \texttt{AWS SDK for Ruby V3}
**AwsEcsTaskDefinitionContainerDefinitionsEnvironmentDetails**

An environment variable to pass to the container.

**Contents**

**Name**

The name of the environment variable.

Type: String

Pattern: .*

Required: No

**Value**

The value of the environment variable.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsEnvironmentFilesDetails**

A file that contain environment variables to pass to a container.

**Contents**

**Type**

The type of environment file. The valid value is `s3`.

Type: String  
Pattern: `.\S.*`  
Required: No

**Value**

The ARN of the S3 object that contains the environment variable file.

Type: String  
Pattern: `.\S.*`  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsExtraHostsDetails**

A hostname and IP address mapping to append to the `/etc/hosts` file on the container.

**Contents**

**Hostname**

The hostname to use in the `/etc/hosts` entry.

Type: String

Pattern: `.\S.*`

Required: No

**IpAddress**

The IP address to use in the `/etc/hosts` entry.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsFirelensConfigurationDetails**

The FireLens configuration for the container. The configuration specifies and configures a log router for container logs.

**Contents**

**Options**

The options to use to configure the log router.

The valid option keys are as follows:
- `enable-ecs-log-metadata`. The value can be `true` or `false`.
- `config-file-type`. The value can be `s3` or `file`.
- `config-file-value`. The value is either an S3 ARN or a file path.

Type: String to string map

Key Pattern: `.*\S.*`

Value Pattern: `.*\S.*`

Required: No

**Type**

The log router to use. Valid values are `fluentbit` or `fluentd`.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsHealthCheckDetails**

The container health check command and associated configuration parameters for the container.

**Contents**

**Command**

The command that the container runs to determine whether it is healthy.

Type: Array of strings

Pattern: .*\S.*

Required: No

**Interval**

The time period in seconds between each health check execution. The default value is 30 seconds.

Type: Integer

Required: No

**Retries**

The number of times to retry a failed health check before the container is considered unhealthy. The default value is 3.

Type: Integer

Required: No

**StartPeriod**

The optional grace period in seconds that allows containers time to bootstrap before failed health checks count towards the maximum number of retries.

Type: Integer

Required: No

**Timeout**

The time period in seconds to wait for a health check to succeed before it is considered a failure. The default value is 5.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
The Linux capabilities for the container that are added to or dropped from the default configuration provided by Docker.

## Contents

### Add

The Linux capabilities for the container that are added to the default configuration provided by Docker. Valid values are as follows:

- Valid values: "ALL" | "AUDIT_CONTROL" | "AUDIT_WRITE" | "BLOCK_SUSPEND" | "CHOWN" | "DAC_OVERRIDE" | "DAC_READ_SEARCH" | "FOWNER" | "FSETID" | "IPC_LOCK" | "IPC_OWNER" | "KILL" | "LEASE" | "LINUX_IMMUTABLE" | "MAC_ADMIN" | "MAC_OVERRIDE" | "MKNOD" | "NET_ADMIN" | "NET_BIND_SERVICE" | "NET_BROADCAST" | "NET_RAW" | "SETFCAP" | "SETGID" | "SETPCAP" | "SETUID" | "SYS_ADMIN" | "SYS_BOOT" | "SYS_CHROOT" | "SYS_MODULE" | "SYS_NICE" | "SYS_PACCT" | "SYS_PTRACE" | "SYS_RAWIO" | "SYS_RESOURCE" | "SYS_TIME" | "SYS_TTY_CONFIG" | "SYSLOG" | "WAKE_ALARM"

Type: Array of strings

Pattern: .*\S.*

Required: No

### Drop

The Linux capabilities for the container that are dropped from the default configuration provided by Docker.

- Valid values: "ALL" | "AUDIT_CONTROL" | "AUDIT_WRITE" | "BLOCK_SUSPEND" | "CHOWN" | "DAC_OVERRIDE" | "DAC_READ_SEARCH" | "FOWNER" | "FSETID" | "IPC_LOCK" | "IPC_OWNER" | "KILL" | "LEASE" | "LINUX_IMMUTABLE" | "MAC_ADMIN" | "MAC_OVERRIDE" | "MKNOD" | "NET_ADMIN" | "NET_BIND_SERVICE" | "NET_BROADCAST" | "NET_RAW" | "SETFCAP" | "SETGID" | "SETPCAP" | "SETUID" | "SYS_ADMIN" | "SYS_BOOT" | "SYS_CHROOT" | "SYS_MODULE" | "SYS_NICE" | "SYS_PACCT" | "SYS_PTRACE" | "SYS_RAWIO" | "SYS_RESOURCE" | "SYS_TIME" | "SYS_TTY_CONFIG" | "SYSLOG" | "WAKE_ALARM"

Type: Array of strings

Pattern: .*\S.*

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersDetails

>Linux-specific modifications that are applied to the container, such as Linux kernel capabilities.

Contents

Capabilities

The Linux capabilities for the container that are added to or dropped from the default configuration provided by Docker.

Type: AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersCapabilitiesDetails (p. 897) object

Required: No

Devices

The host devices to expose to the container.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersDevicesDetails (p. 900) objects

Required: No

InitProcessEnabled

Whether to run an init process inside the container that forwards signals and reaps processes.

Type: Boolean

Required: No

MaxSwap

The total amount of swap memory (in MiB) that a container can use.

Type: Integer

Required: No

SharedMemorySize

The value for the size (in MiB) of the /dev/shm volume.

Type: Integer

Required: No

Swappiness

Configures the container's memory swappiness behavior. Determines how aggressively pages are swapped. The higher the value, the more aggressive the swappiness. The default is 60.

Type: Integer

Required: No

Tmpfs

The container path, mount options, and size (in MiB) of the tmpfs mount.

Type: Array of AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersTmpfsDetails (p. 901) objects

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionContainerDefinitionsLinuxParametersDevicesDetails**

A host device to expose to the container.

**Contents**

**ContainerPath**

The path inside the container at which to expose the host device.

Type: String

Pattern: .*

Required: No

**HostPath**

The path for the device on the host container instance.

Type: String

Pattern: .*

Required: No

**Permissions**

The explicit permissions to provide to the container for the device. By default, the container has permissions for read, write, and *mknod* for the device.

Type: Array of strings

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**ContainerPath**

The absolute file path where the tmpfs volume is to be mounted.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**MountOptions**

The list of tmpfs volume mount options.

- **Type:** Array of strings
- **Pattern:** .*
- **Required:** No

**Size**

The maximum size (in MiB) of the tmpfs volume.

- **Type:** Integer
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/c/)
- [AWS SDK for Go](https://aws.amazon.com/go/)
- [AWS SDK for Java V2](https://aws.amazon.com/java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/ruby/)
**AwsEcsTaskDefinitionContainerDefinitionsLogConfigurationDetails**

The log configuration specification for the container.

**Contents**

**LogDriver**

The log driver to use for the container.

Valid values on AWS Fargate are as follows:

- awsfirelens
- awslogs
- splunk

Valid values on Amazon EC2 are as follows:

- awsfirelens
- awslogs
- fluentd
- gelf
- journald
- json-file
- logentries
- splunk
- syslog

Type: String

Pattern: .*\S.*

Required: No

**Options**

The configuration options to send to the log driver. Requires version 1.19 of the Docker Remote API or greater on your container instance.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

**SecretOptions**

The secrets to pass to the log configuration.

Type: Array of

**AwsEcsTaskDefinitionContainerDefinitionsLogConfigurationSecretOptionsDetails (p. 904)** objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEcsTaskDefinitionContainerDefinitionsLogConfigurationSecretOptions**

A secret to pass to the log configuration.

**Contents**

**Name**

The name of the secret.

Type: String

Pattern: .\S.*

Required: No

**ValueFrom**

The secret to expose to the container.

The value is either the full ARN of the Secrets Manager secret or the full ARN of the parameter in the Systems Manager Parameter Store.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsMountPointsDetails**

A mount point for the data volumes in the container.

**Contents**

**ContainerPath**

The path on the container to mount the host volume at.

Type: String

Pattern: .*\S.*

Required: No

**ReadOnly**

Whether the container has read-only access to the volume.

Type: Boolean

Required: No

**SourceVolume**

The name of the volume to mount. Must match the name of a volume listed in VolumeDetails for the task definition.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/getting-started/docs/cpp-sdk/)
- [AWS SDK for Go](https://aws.amazon.com/getting-started/docs/go-sdk/)
- [AWS SDK for Java V2](https://aws.amazon.com/getting-started/docs/java-sdk-v2/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/getting-started/docs/ruby-sdk-v3/)
**AwsEcsTaskDefinitionContainerDefinitionsPortMappingsDetails**

A port mapping for the container.

**Contents**

**ContainerPort**

The port number on the container that is bound to the user-specified or automatically assigned host port.

Type: Integer

Required: No

**HostPort**

The port number on the container instance to reserve for the container.

Type: Integer

Required: No

**Protocol**

The protocol used for the port mapping. The default is `tcp`.

Type: String

Pattern: ".\S.*"

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/api-reference.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/v1/developer-guide/api-reference.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java/v2/developer-guide/api-reference.html)
**AwsEcsTaskDefinitionContainerDefinitionsRepositoryCredentialsDetails**

The private repository authentication credentials to use.

**Contents**

**CredentialsParameter**

The ARN of the secret that contains the private repository credentials.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsResourceRequirementsDetails**

A resource to assign to a container.

**Contents**

**Type**

The type of resource to assign to a container. Valid values are GPU or InferenceAccelerator.

Type: String

Pattern: .\S.*

Required: No

**Value**

The value for the specified resource type.

For GPU, the value is the number of physical GPUs the Amazon ECS container agent reserves for the container.

For InferenceAccelerator, the value should match the DeviceName attribute of an entry in InferenceAccelerators.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-golang/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsEcsTaskDefinitionContainerDefinitionsSecretsDetails**

A secret to pass to the container.

**Contents**

**Name**

- The name of the secret.
  - Type: String
  - Pattern: .\S+\.
  - Required: No

**ValueFrom**

- The secret to expose to the container. The value is either the full ARN of the Secrets Manager secret or the full ARN of the parameter in the Systems Manager Parameter Store.
  - Type: String
  - Pattern: .\S+\.
  - Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsSystemControlsDetails**

A namespaced kernel parameter to set in the container.

**Contents**

**Namespace**

The namespaced kernel parameter for which to set a value.

Type: String

Pattern: .[^\S\s]*

Required: No

**Value**

The value of the parameter.

Type: String

Pattern: .[^\S\s]*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java-v2)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby-v3)
**AwsEcsTaskDefinitionContainerDefinitionsUlimitsDetails**

A ulimit to set in the container.

**Contents**

**HardLimit**

The hard limit for the ulimit type.

Type: Integer

Required: No

**Name**

The type of the ulimit. Valid values are as follows:

- core
- cpu
- data
- fsize
- locks
- memlock
- msgqueue
- nice
- nofile
- nproc
- rss
- rtprio
- rtttime
- sigpending
- stack

Type: String

Pattern: .*/\S.*

Required: No

**SoftLimit**

The soft limit for the ulimit type.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionContainerDefinitionsVolumesFromDetails**

A data volume to mount from another container.

**Contents**

**ReadOnly**

Whether the container has read-only access to the volume.

Type: Boolean

Required: No

**SourceContainer**

The name of another container within the same task definition from which to mount volumes.

Type: String

Pattern: .\*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionDetails**

Details about a task definition. A task definition describes the container and volume definitions of an Amazon Elastic Container Service task.

**Contents**

**ContainerDefinitions**

The container definitions that describe the containers that make up the task.

Type: Array of `AwsEcsTaskDefinitionContainerDefinitionsDetails (p. 886)` objects

Required: No

**Cpu**

The number of CPU units used by the task. Valid values are as follows:

- 256 (.25 vCPU)
- 512 (.5 vCPU)
- 1024 (1 vCPU)
- 2048 (2 vCPU)
- 4096 (4 vCPU)

Type: String

Pattern: `.\S.*`

Required: No

**ExecutionRoleArn**

The ARN of the task execution role that grants the container agent permission to make API calls on behalf of the container user.

Type: String

Pattern: `.\S.*`

Required: No

**Family**

The name of a family that this task definition is registered to.

Type: String

Pattern: `.\S.*`

Required: No

**InferenceAccelerators**

The Elastic Inference accelerators to use for the containers in the task.

Type: Array of `AwsEcsTaskDefinitionInferenceAcceleratorsDetails (p. 917)` objects

Required: No

**IpcMode**

The inter-process communication (IPC) resource namespace to use for the containers in the task.

Valid values are as follows:
• host
• none
• task

Type: String
Pattern: .*\S.*
Required: No

Memory
The amount (in MiB) of memory used by the task.

For tasks that are hosted on Amazon EC2, you can provide a task-level memory value or a container-
level memory value. For tasks that are hosted on AWS Fargate, you must use one of the specified
values in the Amazon Elastic Container Service Developer Guide, which determines your range of
supported values for the Cpu and Memory parameters.

Type: String
Pattern: .*\S.*
Required: No

NetworkMode
The Docker networking mode to use for the containers in the task. Valid values are as follows:
• awsvpc
• bridge
• host
• none

Type: String
Pattern: .*\S.*
Required: No

PidMode
The process namespace to use for the containers in the task. Valid values are host or task.

Type: String
Pattern: .*\S.*
Required: No

PlacementConstraints
The placement constraint objects to use for tasks.

Type: Array of AwsEcsTaskDefinitionPlacementConstraintsDetails (p. 918) objects
Required: No

ProxyConfiguration
The configuration details for the App Mesh proxy.

Type: AwsEcsTaskDefinitionProxyConfigurationDetails (p. 919) object
Required: No

**RequiresCompatibilities**

The task launch types that the task definition was validated against.

Type: Array of strings

Pattern: .\S.*

Required: No

**TaskRoleArn**

The short name or ARN of the IAM role that grants containers in the task permission to call AWS API operations on your behalf.

Type: String

Pattern: .\S.*

Required: No

**Volumes**

The data volume definitions for the task.

Type: Array of [AwsEcsTaskDefinitionVolumesDetails (p. 921)] objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionInferenceAcceleratorsDetails**

An Elastic Inference accelerator to use for the containers in the task.

**Contents**

**DeviceName**

The Elastic Inference accelerator device name.

Type: String

Pattern: .\S\.*

Required: No

**DeviceType**

The Elastic Inference accelerator type to use.

Type: String

Pattern: .\S\.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDefinitionPlacementConstraintsDetails**

A placement constraint object to use for tasks.

### Contents

**Expression**

A cluster query language expression to apply to the constraint.

Type: String

Pattern: .*\S.*

Required: No

**Type**

The type of constraint.

Type: String

Pattern: .*\S.*

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionProxyConfigurationDetails**

The configuration details for the App Mesh proxy.

**Contents**

**ContainerName**

The name of the container that will serve as the App Mesh proxy.

Type: String

Pattern: .*\S.*

Required: No

**ProxyConfigurationProperties**

The set of network configuration parameters to provide to the Container Network Interface (CNI) plugin, specified as key-value pairs.

Type: Array of

AWS EcsTaskDefinitionProxyConfigurationProxyConfigurationPropertiesDetails (p. 920) objects

Required: No

**Type**

The proxy type.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionProxyConfigurationProxyConfigurationPropertiesDetails**

A network configuration parameter to provide to the Container Network Interface (CNI) plugin.

**Contents**

**Name**

The name of the property.

Type: String

Pattern: .*[^\S\s]*

Required: No

**Value**

The value of the property.

Type: String

Pattern: .*[^\S\s]*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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AwsEcsTaskDefinitionVolumesDetails
A data volume to mount from another container.

Contents

DockerVolumeConfiguration
Information about a Docker volume.
Type: AwsEcsTaskDefinitionVolumesDockerVolumeConfigurationDetails (p. 922) object
Required: No

EfsVolumeConfiguration
Information about the Amazon Elastic File System file system that is used for task storage.
Type: AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationDetails (p. 925) object
Required: No

Host
Information about a bind mount host volume.
Type: AwsEcsTaskDefinitionVolumesHostDetails (p. 927) object
Required: No

Name
The name of the data volume.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionVolumesDockerVolumeConfigurationDetails**  
Information about a Docker volume.

**Contents**

**Autoprovision**

Whether to create the Docker volume automatically if it does not already exist.

Type: Boolean

Required: No

**Driver**

The Docker volume driver to use.

Type: String

Pattern: .*\S.*

Required: No

**DriverOpts**

A map of Docker driver-specific options that are passed through.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

**Labels**

Custom metadata to add to the Docker volume.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

**Scope**

The scope for the Docker volume that determines its lifecycle. Docker volumes that are scoped to a task are provisioned automatically when the task starts and destroyed when the task stops. Docker volumes that are shared persist after the task stops. Valid values are `shared` or `task`.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationAuthorizationConfigDetails

Contents

AccessPointId

The Amazon EFS access point identifier to use.
Type: String
Pattern: .\S.*
Required: No

Iam

Whether to use the Amazon ECS task IAM role defined in a task definition when mounting the Amazon EFS file system.
Type: String
Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationDetails**

Information about the Amazon Elastic File System file system that is used for task storage.

**Contents**

**AuthorizationConfig**

The authorization configuration details for the Amazon EFS file system.

Type: `AwsEcsTaskDefinitionVolumesEfsVolumeConfigurationAuthorizationConfigDetails` object

Required: No

**FilesystemId**

The Amazon EFS file system identifier to use.

Type: String

Pattern: `.*\S.*`

Required: No

**RootDirectory**

The directory within the Amazon EFS file system to mount as the root directory inside the host.

Type: String

Pattern: `.*\S.*`

Required: No

**TransitEncryption**

Whether to enable encryption for Amazon EFS data in transit between the Amazon ECS host and the Amazon EFS server.

Type: String

Pattern: `.*\S.*`

Required: No

**TransitEncryptionPort**

The port to use when sending encrypted data between the Amazon ECS host and the Amazon EFS server.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsEcsTaskDefinitionVolumesHostDetails**

Information about a bind mount host volume.

**Contents**

**SourcePath**

The path on the host container instance that is presented to the container.

- Type: String
- Pattern: . *\S . *
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskDetails**

Provides details about a task in a cluster.

**Contents**

**ClusterArn**

The Amazon Resource Name (ARN) of the cluster that hosts the task.

Type: String

Pattern: .*\S.*

Required: No

**Containers**

The containers that are associated with the task.

Type: Array of *AwsEcsContainerDetails* objects

Required: No

**CreatedAt**

The Unix timestamp for the time when the task was created. More specifically, it's for the time when the task entered the **PENDING** state.

Type: String

Pattern: .*\S.*

Required: No

**Group**

The name of the task group that's associated with the task.

Type: String

Pattern: .*\S.*

Required: No

**StartedAt**

The Unix timestamp for the time when the task started. More specifically, it's for the time when the task transitioned from the **PENDING** state to the **RUNNING** state.

Type: String

Pattern: .*\S.*

Required: No

**StartedBy**

The tag specified when a task is started. If an Amazon ECS service started the task, the **startedBy** parameter contains the deployment ID of that service.

Type: String

Pattern: .*\S.*
TaskDefinitionArn

The ARN of the task definition that creates the task.

Type: String

Pattern: .*\S.*

Required: No

Version

The version counter for the task.

Type: String

Pattern: .*\S.*

Required: No

Volumes

Details about the data volume that is used in a task definition.

Type: Array of [EcsTaskVolumeDetails](p. 930) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEcsTaskVolumeDetails**

Provides information about a data volume that’s used in a task definition.

**Contents**

**Host**

This parameter is specified when you use bind mount host volumes. The contents of the host parameter determine whether your bind mount host volume persists on the host container instance and where it's stored.

Type: `AwsEcsTaskVolumeHostDetails (p. 931)` object

Required: No

**Name**

The name of the volume. Up to 255 letters (uppercase and lowercase), numbers, underscores, and hyphens are allowed. This name is referenced in the `sourceVolume` parameter of container definition `mountPoints`.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEcsTaskVolumeHostDetails**

Provides details on a container instance bind mount host volume.

**Contents**

**SourcePath**

When the host parameter is used, specify a `sourcePath` to declare the path on the host container instance that's presented to the container.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsMountPoint**

Details for a volume mount point that's used in a container definition.

**Contents**

**ContainerPath**

The path on the container to mount the host volume at.

Type: String  
Pattern: .*\S.*  
Required: No

**SourceVolume**

The name of the volume to mount. Must be a volume name referenced in the name parameter of task definition `volume`.

Type: String  
Pattern: .*\S.*  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Elastic File System (EFS) objects**

**Amazon Elastic File System (EFS) objects**

- AwsEfsAccessPointDetails (p. 933)
- AwsEfsAccessPointPosixUserDetails (p. 935)
- AwsEfsAccessPointRootDirectoryCreationInfoDetails (p. 936)
- AwsEfsAccessPointRootDirectoryDetails (p. 937)
**AwsEfsAccessPointDetails**

Provides information about an Amazon EFS access point.

**Contents**

**AccessPointId**

The ID of the Amazon EFS access point.

Type: String

Pattern: .\S+.

Required: No

**Arn**

The Amazon Resource Name (ARN) of the Amazon EFS access point.

Type: String

Pattern: .\S+.

Required: No

**ClientToken**

The opaque string specified in the request to ensure idempotent creation.

Type: String

Pattern: .\S+.

Required: No

**FileSystemId**

The ID of the Amazon EFS file system that the access point applies to.

Type: String

Pattern: .\S+.

Required: No

**PosixUser**

The full POSIX identity, including the user ID, group ID, and secondary group IDs on the access point, that is used for all file operations by NFS clients using the access point.

Type: `AwsEfsAccessPointPosixUserDetails (p. 935)` object

Required: No

**RootDirectory**

The directory on the Amazon EFS file system that the access point exposes as the root directory to NFS clients using the access point.

Type: `AwsEfsAccessPointRootDirectoryDetails (p. 937)` object

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEfsAccessPointPosixUserDetails**

Provides details for all file system operations using this Amazon EFS access point.

**Contents**

**Gid**

The POSIX group ID used for all file system operations using this access point.

- Type: String
- Pattern: `.\S+.`
- Required: No

**SecondaryGids**

Secondary POSIX group IDs used for all file system operations using this access point.

- Type: Array of strings
- Pattern: `.\S+.`
- Required: No

**Uid**

The POSIX user ID used for all file system operations using this access point.

- Type: String
- Pattern: `.\S+.`
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsEfsAccessPointRootDirectoryCreationInfoDetails**

Provides information about the settings that Amazon EFS uses to create the root directory when a client connects to an access point.

**Contents**

**OwnerGid**

Specifies the POSIX group ID to apply to the root directory.

Type: String

Pattern: .*\S.*

Required: No

**OwnerUid**

Specifies the POSIX user ID to apply to the root directory.

Type: String

Pattern: .*\S.*

Required: No

**Permissions**

Specifies the POSIX permissions to apply to the root directory, in the format of an octal number representing the file's mode bits.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEfsAccessPointRootDirectoryDetails**

Provides information about the directory on the Amazon EFS file system that the access point exposes as the root directory to NFS clients using the access point.

**Contents**

**CreationInfo**

Specifies the POSIX IDs and permissions to apply to the access point's root directory.

Type: **AwsEfsAccessPointRootDirectoryCreationInfoDetails (p. 936)** object

Required: No

**Path**

Specifies the path on the Amazon EFS file system to expose as the root directory to NFS clients using the access point to access the EFS file system. A path can have up to four subdirectories. If the specified path does not exist, you are required to provide `CreationInfo`.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Elastic Kubernetes Service (EKS) objects**

**Amazon Elastic Kubernetes Service objects**

- AwsEksClusterDetails (p. 938)
- AwsEksClusterLoggingClusterLoggingDetails (p. 940)
- AwsEksClusterLoggingDetails (p. 941)
- AwsEksClusterResourcesVpcConfigDetails (p. 942)
AwsEksClusterDetails

Provides details about an Amazon EKS cluster.

Contents

Arn

The ARN of the cluster.

Type: String

Pattern: .*\S.*

Required: No

CertificateAuthorityData

The certificate authority data for the cluster.

Type: String

Pattern: .*\S.*

Required: No

ClusterStatus

The status of the cluster. Valid values are as follows:

• ACTIVE
• CREATING
• DELETING
• FAILED
• PENDING
• UPDATING

Type: String

Pattern: .*\S.*

Required: No

Endpoint

The endpoint for the Amazon EKS API server.

Type: String

Pattern: .*\S.*

Required: No

Logging

The logging configuration for the cluster.

Type: AwsEksClusterLoggingDetails (p. 941) object

Required: No

Name

The name of the cluster.
Type: String
Pattern: .*\S.*
Required: No

**ResourcesVpcConfig**

The VPC configuration used by the cluster control plane.

Type: [AwsEksClusterResourcesVpcConfigDetails](p. 942) object

Required: No

**RoleArn**

The ARN of the IAM role that provides permissions for the Amazon EKS control plane to make calls to AWS API operations on your behalf.

Type: String
Pattern: .*\S.*
Required: No

**Version**

The Amazon EKS server version for the cluster.

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](
- [AWS SDK for Go](
- [AWS SDK for Java V2](
- [AWS SDK for Ruby V3](

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**AwsEksClusterLoggingClusterLoggingDetails**

Details for a cluster logging configuration.

**Contents**

**Enabled**

Whether the logging types that are listed in Types are enabled.

Type: Boolean

Required: No

**Types**

A list of logging types. Valid values are as follows:

- api
- audit
- authenticator
- controllerManager
- scheduler

Type: Array of strings

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsEksClusterLoggingDetails**

The logging configuration for an Amazon EKS cluster.

**Contents**

**ClusterLogging**

Cluster logging configurations.

Type: Array of [AwsEksClusterLoggingClusterLoggingDetails](#) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsEksClusterResourcesVpcConfigDetails

Information about the VPC configuration used by the cluster control plane.

Contents

EndpointPublicAccess

Indicates whether the Amazon EKS public API server endpoint is turned on. If the Amazon EKS public API server endpoint is turned off, your cluster's Kubernetes API server can only receive requests that originate from within the cluster VPC.

Type: Boolean
Required: No

SecurityGroupIds

The security groups that are associated with the cross-account elastic network interfaces that are used to allow communication between your nodes and the Amazon EKS control plane.

Type: Array of strings
Pattern: .*\S.*
Required: No

SubnetIds

The subnets that are associated with the cluster.

Type: Array of strings
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS Elastic Beanstalk

AWS Elastic Beanstalk objects

- AwsElasticBeanstalkEnvironmentDetails (p. 943)
- AwsElasticBeanstalkEnvironmentEnvironmentLink (p. 946)
- AwsElasticBeanstalkEnvironmentOptionSetting (p. 947)
- AwsElasticBeanstalkEnvironmentTier (p. 948)
AwsElasticBeanstalkEnvironmentDetails

Contains details about an Elastic Beanstalk environment.

Contents

**ApplicationName**

The name of the application that is associated with the environment.

Type: String
Pattern: .*$
Required: No

**Cname**

The URL to the CNAME for this environment.

Type: String
Pattern: .*$
Required: No

**DateCreated**

The creation date for this environment.

Type: String
Pattern: .*$
Required: No

**DateUpdated**

The date when this environment was last modified.

Type: String
Pattern: .*$
Required: No

**Description**

A description of the environment.

Type: String
Pattern: .*$
Required: No

**EndpointUrl**

For load-balanced, autoscaling environments, the URL to the load balancer. For single-instance environments, the IP address of the instance.

Type: String
Pattern: .*$
Required: No

**EnvironmentArn**

The ARN of the environment.

Type: String

Pattern: .*\S.*

Required: No

**EnvironmentId**

The identifier of the environment.

Type: String

Pattern: .*\S.*

Required: No

**EnvironmentLinks**

Links to other environments in the same group.

Type: Array of [AwsElasticBeanstalkEnvironmentEnvironmentLink](p. 946) objects

Required: No

**EnvironmentName**

The name of the environment.

Type: String

Pattern: .*\S.*

Required: No

**OptionSettings**

The configuration setting for the environment.

Type: Array of [AwsElasticBeanstalkEnvironmentOptionSetting](p. 947) objects

Required: No

**PlatformArn**

The ARN of the platform version for the environment.

Type: String

Pattern: .*\S.*

Required: No

**SolutionStackName**

The name of the solution stack that is deployed with the environment.

Type: String

Pattern: .*\S.*

Required: No
Status

The current operational status of the environment. Valid values are as follows:

- Aborting
- Launching
- LinkingFrom
- LinkingTo
- Ready
- Terminated
- Terminating
- Updating

Type: String
Pattern: .*\S.*
Required: No

Tier

The tier of the environment.

Type: AwsElasticBeanstalkEnvironmentTier (p. 948) object
Required: No

VersionLabel

The application version of the environment.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsElasticBeanstalkEnvironmentEnvironmentLink

Contains information about a link to another environment that is in the same group.

Contents

EnvironmentName

The name of the linked environment.

Type: String

Pattern: .*\S.*

Required: No

LinkName

The name of the environment link.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsElasticBeanstalkEnvironmentOptionSetting

A configuration option setting for the environment.

Contents

Namespace

The type of resource that the configuration option is associated with.

Type: String

Pattern: .*

Required: No

OptionName

The name of the option.

Type: String

Pattern: .*

Required: No

ResourceName

The name of the resource.

Type: String

Pattern: .*

Required: No

Value

The value of the configuration setting.

Type: String

Pattern: .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElasticBeanstalkEnvironmentTier**

Contains information about the tier of the environment.

**Contents**

**Name**

The name of the environment tier. Valid values are `WebServer` or `Worker`.

Type: String

Pattern: `.*\S.*`

Required: No

**Type**

The type of environment tier. Valid values are `Standard` or `SQS/HTTP`.

Type: String

Pattern: `.*\S.*`

Required: No

**Version**

The version of the environment tier.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon ElasticSearch objects**

**ElasticSearch objects**

- [AwsElasticsearchDomainDetails](p. 950)
- [AwsElasticsearchDomainDomainEndpointOptions](p. 953)
- [AwsElasticsearchDomainElasticsearchClusterConfigDetails](p. 954)
- [AwsElasticsearchDomainElasticsearchClusterConfigZoneAwarenessConfigDetails](p. 956)
- [AwsElasticsearchDomainEncryptionAtRestOptions](p. 957)
- [AwsElasticsearchDomainLogPublishingOptions](p. 958)
- [AwsElasticsearchDomainLogPublishingOptionsLogConfig](p. 959)
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Amazon Elasticsearch objects

- `AwsElasticsearchDomainNodeToNodeEncryptionOptions (p. 960)`
- `AwsElasticsearchDomainServiceSoftwareOptions (p. 961)`
- `AwsElasticsearchDomainVPCOptions (p. 963)`
**AwsElasticsearchDomainDetails**

Information about an Elasticsearch domain.

**Contents**

**AccessPolicies**

IAM policy document specifying the access policies for the new Elasticsearch domain.

Type: String

Pattern: .\S.\

Required: No

**DomainEndpointOptions**

Additional options for the domain endpoint.

Type: AwsElasticsearchDomainDomainEndpointOptions (p. 953) object

Required: No

**DomainId**

Unique identifier for an Elasticsearch domain.

Type: String

Pattern: .\S.\

Required: No

**DomainName**

Name of an Elasticsearch domain.

Domain names are unique across all domains owned by the same account within an AWS Region.

Domain names must start with a lowercase letter and must be between 3 and 28 characters.

Valid characters are a-z (lowercase only), 0-9, and – (hyphen).

Type: String

Pattern: .\S.\

Required: No

**ElasticsearchClusterConfig**

Information about an OpenSearch cluster configuration.

Type: AwsElasticsearchDomainElasticsearchClusterConfigDetails (p. 954) object

Required: No

**ElasticsearchVersion**

OpenSearch version.

Type: String

Pattern: .\S.\n
Required: No
EncryptionAtRestOptions

Details about the configuration for encryption at rest.

Type: AwsElasticsearchDomainEncryptionAtRestOptions (p. 957) object

Required: No

Endpoint

Domain-specific endpoint used to submit index, search, and data upload requests to an Elasticsearch domain.

The endpoint is a service URL.

Type: String

Pattern: .*\S.*

Required: No

Endpoints

The key-value pair that exists if the Elasticsearch domain uses VPC endpoints.

Type: String to string map

Key Pattern: .*\S.*

Value Pattern: .*\S.*

Required: No

LogPublishingOptions

Configures the CloudWatch Logs to publish for the Elasticsearch domain.

Type: AwsElasticsearchDomainLogPublishingOptions (p. 958) object

Required: No

NodeToNodeEncryptionOptions

Details about the configuration for node-to-node encryption.

Type: AwsElasticsearchDomainNodeToNodeEncryptionOptions (p. 960) object

Required: No

ServiceSoftwareOptions

Information about the status of a domain relative to the latest service software.

Type: AwsElasticsearchDomainServiceSoftwareOptions (p. 961) object

Required: No

VPCOptions

Information that OpenSearch derives based on VPCOptions for the domain.

Type: AwsElasticsearchDomainVPCOptions (p. 963) object

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElasticsearchDomainDomainEndpointOptions**

Additional options for the domain endpoint, such as whether to require HTTPS for all traffic.

**Contents**

**EnforceHTTPS**

Whether to require that all traffic to the domain arrive over HTTPS.

Type: Boolean

Required: No

**TLSSecurityPolicy**

The TLS security policy to apply to the HTTPS endpoint of the OpenSearch domain.

Valid values:

- Policy-Min-TLS-1-0-2019-07, which supports TLSv1.0 and higher
- Policy-Min-TLS-1-2-2019-07, which only supports TLSv1.2

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElasticsearchDomainElasticsearchClusterConfigDetails**

details about the configuration of an OpenSearch cluster.

**Contents**

**DedicatedMasterCount**

The number of instances to use for the master node. If this attribute is specified, then `DedicatedMasterEnabled` must be `true`.

Type: Integer

Required: No

**DedicatedMasterEnabled**

Whether to use a dedicated master node for the Elasticsearch domain. A dedicated master node performs cluster management tasks, but doesn't hold data or respond to data upload requests.

Type: Boolean

Required: No

**DedicatedMasterType**

The hardware configuration of the computer that hosts the dedicated master node. A sample value is `m3.medium.elasticsearch`. If this attribute is specified, then `DedicatedMasterEnabled` must be `true`.

For a list of valid values, see [Supported instance types in Amazon OpenSearch Service](https://docs.aws.amazon.com/opensearchservice/latest/developerguide/instances-supported-instance-types.html) in the *Amazon OpenSearch Service Developer Guide*.

Type: String

Pattern: `.\S.*`

Required: No

**InstanceCount**

The number of data nodes to use in the Elasticsearch domain.

Type: Integer

Required: No

**InstanceType**

The instance type for your data nodes. For example, `m3.medium.elasticsearch`.

For a list of valid values, see [Supported instance types in Amazon OpenSearch Service](https://docs.aws.amazon.com/opensearchservice/latest/developerguide/instances-supported-instance-types.html) in the *Amazon OpenSearch Service Developer Guide*.

Type: String

Pattern: `.\S.*`

Required: No

**ZoneAwarenessConfig**

Configuration options for zone awareness. Provided if `ZoneAwarenessEnabled` is `true`.
Type: `AwsElasticsearchDomainElasticsearchClusterConfigZoneAwarenessConfigDetails` (p. 956) object

Required: No

**ZoneAwarenessEnabled**

Whether to enable zone awareness for the Elasticsearch domain. When zone awareness is enabled, OpenSearch allocates the cluster's nodes and replica index shards across Availability Zones in the same Region. This prevents data loss and minimizes downtime if a node or data center fails.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsElasticsearchDomainElasticsearchClusterConfigZoneAwarenessConfig

Configuration options for zone awareness.

Contents

AvailabilityZoneCount

The number of Availability Zones that the domain uses. Valid values are 2 and 3. The default is 2.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElasticsearchDomainEncryptionAtRestOptions**

Details about the configuration for encryption at rest.

**Contents**

**Enabled**

Whether encryption at rest is enabled.

Type: Boolean

Required: No

**KmsKeyId**

The AWS KMS key ID. Takes the form 1a2a3a4-1a2a-3a4a-5a6a-1a2a3a4a5a6a.

Type: String

Pattern: .\S+. *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsElasticsearchDomainLogPublishingOptions

configures the CloudWatch Logs to publish for the Elasticsearch domain.

Contents

AuditLogs

The log configuration.

Type: AwsElasticsearchDomainLogPublishingOptionsLogConfig (p. 959) object

Required: No

IndexSlowLogs

Configures the OpenSearch index logs publishing.

Type: AwsElasticsearchDomainLogPublishingOptionsLogConfig (p. 959) object

Required: No

SearchSlowLogs

Configures the OpenSearch search slow log publishing.

Type: AwsElasticsearchDomainLogPublishingOptionsLogConfig (p. 959) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElasticsearchDomainLogPublishingOptionsLogConfig**

The log configuration.

**Contents**

**CloudWatchLogsLogGroupArn**

The ARN of the CloudWatch Logs group to publish the logs to.

- Type: String
- Pattern: .*
- Required: No

**Enabled**

Whether the log publishing is enabled.

- Type: Boolean
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElasticsearchDomainNodeToNodeEncryptionOptions**

Details about the configuration for node-to-node encryption.

**Contents**

**Enabled**

Whether node-to-node encryption is enabled.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElasticsearchDomainServiceSoftwareOptions**

Information about the state of the domain relative to the latest service software.

**Contents**

**AutomatedUpdateDate**

The epoch time when the deployment window closes for required updates. After this time, Amazon OpenSearch Service schedules the software upgrade automatically.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**Cancellable**

Whether a request to update the domain can be canceled.

- **Type**: Boolean
- **Required**: No

**CurrentVersion**

The version of the service software that is currently installed on the domain.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**Description**

A more detailed description of the service software status.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**NewVersion**

The most recent version of the service software.

- **Type**: String
- **Pattern**: .*
- **Required**: No

**UpdateAvailable**

Whether a service software update is available for the domain.

- **Type**: Boolean
- **Required**: No

**UpdateStatus**

The status of the service software update. Valid values are as follows:
• COMPLETED
• ELIGIBLE
• IN_PROGRESS
• NOT_ELIGIBLE
• PENDING_UPDATE

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsElasticsearchDomainVPCOptions**

Information that OpenSearch derives based on VPCOptions for the domain.

**Contents**

**AvailabilityZones**

The list of Availability Zones associated with the VPC subnets.

Type: Array of strings

Pattern: \.*\S.*

Required: No

**SecurityGroupIds**

The list of security group IDs associated with the VPC endpoints for the domain.

Type: Array of strings

Pattern: \.*\S.*

Required: No

**SubnetIds**

A list of subnet IDs associated with the VPC endpoints for the domain.

Type: Array of strings

Pattern: \.*\S.*

Required: No

**VPCId**

ID for the VPC.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

**Elastic Load Balancing objects**

**Elastic Load Balancing objects**

- [AwsElbAppCookieStickinessPolicy (p. 965)](#)
• `AwsElbLbCookieStickinessPolicy (p. 966)`
• `AwsElbLoadBalancerAccessLog (p. 967)`
• `AwsElbLoadBalancerAdditionalAttribute (p. 968)`
• `AwsElbLoadBalancerAttributes (p. 969)`
• `AwsElbLoadBalancerBackendServerDescription (p. 971)`
• `AwsElbLoadBalancerConnectionDraining (p. 972)`
• `AwsElbLoadBalancerConnectionSettings (p. 973)`
• `AwsElbLoadBalancerCrossZoneLoadBalancing (p. 974)`
• `AwsElbLoadBalancerDetails (p. 975)`
• `AwsElbLoadBalancerHealthCheck (p. 978)`
• `AwsElbLoadBalancerInstance (p. 980)`
• `AwsElbLoadBalancerListener (p. 981)`
• `AwsElbLoadBalancerListenerDescription (p. 983)`
• `AwsElbLoadBalancerPolicies (p. 984)`
• `AwsElbLoadBalancerSourceSecurityGroup (p. 985)`
• `AwsElbv2LoadBalancerAttribute (p. 986)`
• `AwsElbv2LoadBalancerDetails (p. 987)`
• `LoadBalancerState (p. 989)`
**AwsElbAppCookieStickinessPolicy**

Contains information about a stickiness policy that was created using CreateAppCookieStickinessPolicy.

**Contents**

**CookieName**

The name of the application cookie used for stickiness.

Type: String  
Pattern: .*\S.*  
Required: No

**PolicyName**

The mnemonic name for the policy being created. The name must be unique within the set of policies for the load balancer.

Type: String  
Pattern: .*\S.*  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)  
- [AWS SDK for Go](#)  
- [AWS SDK for Java V2](#)  
- [AWS SDK for Ruby V3](#)
**AwsElbLbCookieStickinessPolicy**

Contains information about a stickiness policy that was created using CreateLBCookieStickinessPolicy.

**Contents**

**CookieExpirationPeriod**

The amount of time, in seconds, after which the cookie is considered stale. If an expiration period is not specified, the stickiness session lasts for the duration of the browser session.

Type: Long

Required: No

**PolicyName**

The name of the policy. The name must be unique within the set of policies for the load balancer.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
### AwsElbLoadBalancerAccessLog

Contains information about the access log configuration for the load balancer.

#### Contents

**EmitInterval**

The interval in minutes for publishing the access logs.

You can publish access logs either every 5 minutes or every 60 minutes.

Type: Integer

Required: No

**Enabled**

Indicates whether access logs are enabled for the load balancer.

Type: Boolean

Required: No

**S3BucketName**

The name of the S3 bucket where the access logs are stored.

Type: String

Pattern: .*

Required: No

**S3BucketPrefix**

The logical hierarchy that was created for the S3 bucket.

If a prefix is not provided, the log is placed at the root level of the bucket.

Type: String

Pattern: .*

Required: No

#### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElbLoadBalancerAdditionalAttribute**

Provides information about additional attributes for the load balancer.

**Contents**

**Key**

The name of the attribute.

Type: String

Pattern: .\^\S\.*

Required: No

**Value**

The value of the attribute.

Type: String

Pattern: .\^\S\.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElbLoadBalancerAttributes**

Contains attributes for the load balancer.

**Contents**

**AccessLog**

Information about the access log configuration for the load balancer.

If the access log is enabled, the load balancer captures detailed information about all requests. It delivers the information to a specified S3 bucket.

Type: [AwsElbLoadBalancerAccessLog](#) (p. 967)

Required: No

**AdditionalAttributes**

Any additional attributes for a load balancer.

Type: Array of [AwsElbLoadBalancerAdditionalAttribute](#) (p. 968)

Required: No

**ConnectionDraining**

Information about the connection draining configuration for the load balancer.

If connection draining is enabled, the load balancer allows existing requests to complete before it shifts traffic away from a deregistered or unhealthy instance.

Type: [AwsElbLoadBalancerConnectionDraining](#) (p. 972)

Required: No

**ConnectionSettings**

Connection settings for the load balancer.

If an idle timeout is configured, the load balancer allows connections to remain idle for the specified duration. When a connection is idle, no data is sent over the connection.

Type: [AwsElbLoadBalancerConnectionSettings](#) (p. 973)

Required: No

**CrossZoneLoadBalancing**

Cross-zone load balancing settings for the load balancer.

If cross-zone load balancing is enabled, the load balancer routes the request traffic evenly across all instances regardless of the Availability Zones.

Type: [AwsElbLoadBalancerCrossZoneLoadBalancing](#) (p. 974)

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwsElbLoadBalancerBackendServerDescription

Provides information about the configuration of an EC2 instance for the load balancer.

Contents

InstancePort

The port on which the EC2 instance is listening.

Type: Integer

Required: No

PolicyNames

The names of the policies that are enabled for the EC2 instance.

Type: Array of strings

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsElbLoadBalancerConnectionDraining

Contains information about the connection draining configuration for the load balancer.

Contents

Enabled

Indicates whether connection draining is enabled for the load balancer.

Type: Boolean

Required: No

Timeout

The maximum time, in seconds, to keep the existing connections open before deregistering the instances.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsElbLoadBalancerConnectionSettings

Contains connection settings for the load balancer.

Contents

IdleTimeout

The time, in seconds, that the connection can be idle (no data is sent over the connection) before it is closed by the load balancer.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElbLoadBalancerCrossZoneLoadBalancing**

Contains cross-zone load balancing settings for the load balancer.

**Contents**

**Enabled**

Indicates whether cross-zone load balancing is enabled for the load balancer.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElbLoadBalancerDetails**

Contains details about a Classic Load Balancer.

**Contents**

**AvailabilityZones**

The list of Availability Zones for the load balancer.

Type: Array of strings

Pattern: .\S. *

Required: No

**BackendServerDescriptions**

Information about the configuration of the EC2 instances.

Type: Array of [AwsElbLoadBalancerBackendServerDescription](p. 971) objects

Required: No

**CanonicalHostedZoneName**

The name of the Amazon Route 53 hosted zone for the load balancer.

Type: String

Pattern: .\S. *

Required: No

**CanonicalHostedZoneNameID**

The ID of the Amazon Route 53 hosted zone for the load balancer.

Type: String

Pattern: .\S. *

Required: No

**CreatedTime**

Indicates when the load balancer was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S. *

Required: No

**DnsName**

The DNS name of the load balancer.

Type: String

Pattern: .\S. *
Required: No

**HealthCheck**

Information about the health checks that are conducted on the load balancer.

Type: *AwsElbLoadBalancerHealthCheck (p. 978)* object

Required: No

**Instances**

List of EC2 instances for the load balancer.

Type: Array of *AwsElbLoadBalancerInstance (p. 980)* objects

Required: No

**ListenerDescriptions**

The policies that are enabled for the load balancer listeners.

Type: Array of *AwsElbLoadBalancerListenerDescription (p. 983)* objects

Required: No

**LoadBalancerAttributes**

The attributes for a load balancer.

Type: *AwsElbLoadBalancerAttributes (p. 969)* object

Required: No

**LoadBalancerName**

The name of the load balancer.

Type: String

Pattern: .[^\s.]*

Required: No

**Policies**

The policies for a load balancer.

Type: *AwsElbLoadBalancerPolicies (p. 984)* object

Required: No

**Scheme**

The type of load balancer. Only provided if the load balancer is in a VPC.

If *Scheme* is *internet-facing*, the load balancer has a public DNS name that resolves to a public IP address.

If *Scheme* is *internal*, the load balancer has a public DNS name that resolves to a private IP address.

Type: String

Pattern: .[^\s.]*

Required: No
SecurityGroups

The security groups for the load balancer. Only provided if the load balancer is in a VPC.

Type: Array of strings

Pattern: . *\S . *

Required: No

SourceSecurityGroup

Information about the security group for the load balancer. This is the security group that is used for inbound rules.

Type: AwsElbLoadBalancerSourceSecurityGroup (p. 985) object

Required: No

Subnets

The list of subnet identifiers for the load balancer.

Type: Array of strings

Pattern: . *\S . *

Required: No

VpcId

The identifier of the VPC for the load balancer.

Type: String

Pattern: . *\S . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElbLoadBalancerHealthCheck**

Contains information about the health checks that are conducted on the load balancer.

**Contents**

**HealthyThreshold**

The number of consecutive health check successes required before the instance is moved to the Healthy state.

Type: Integer

Required: No

**Interval**

The approximate interval, in seconds, between health checks of an individual instance.

Type: Integer

Required: No

**Target**

The instance that is being checked. The target specifies the protocol and port. The available protocols are TCP, SSL, HTTP, and HTTPS. The range of valid ports is 1 through 65535.

For the HTTP and HTTPS protocols, the target also specifies the ping path.

For the TCP protocol, the target is specified as `TCP:<port>`.

For the SSL protocol, the target is specified as `SSL:<port>`.

For the HTTP and HTTPS protocols, the target is specified as `<protocol>:<port>/<path to ping>`.

Type: String

Pattern: `.*\S.*`

Required: No

**Timeout**

The amount of time, in seconds, during which no response means a failed health check.

Type: Integer

Required: No

**UnhealthyThreshold**

The number of consecutive health check failures that must occur before the instance is moved to the Unhealthy state.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsElbLoadBalancerInstance**

Provides information about an EC2 instance for a load balancer.

**Contents**

**InstanceId**

The instance identifier.

Type: String

Pattern: .\S\.

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElbLoadBalancerListener**

Information about a load balancer listener.

**Contents**

**InstancePort**

The port on which the instance is listening.

Type: Integer

 Required: No

**InstanceProtocol**

The protocol to use to route traffic to instances.

Valid values: HTTP | HTTPS | TCP | SSL

Type: String

 Pattern: .*

 Required: No

**LoadBalancerPort**

The port on which the load balancer is listening.

On EC2-VPC, you can specify any port from the range 1-65535.

On EC2-Classic, you can specify any port from the following list: 25, 80, 443, 465, 587, 1024-65535.

Type: Integer

 Required: No

**Protocol**

The load balancer transport protocol to use for routing.

Valid values: HTTP | HTTPS | TCP | SSL

Type: String

 Pattern: .*

 Required: No

**SslCertificateId**

The ARN of the server certificate.

Type: String

 Pattern: .*

 Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsElbLoadBalancerListenerDescription**

Lists the policies that are enabled for a load balancer listener.

**Contents**

**Listener**

Information about the listener.

Type: `AwsElbLoadBalancerListener (p. 981)` object

Required: No

**PolicyNames**

The policies enabled for the listener.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsElbLoadBalancerPolicies**

Contains information about the policies for a load balancer.

**Contents**

**AppCookieStickinessPolicies**

The stickiness policies that are created using `CreateAppCookieStickinessPolicy`.

Type: Array of `AwsElbAppCookieStickinessPolicy (p. 965)` objects

Required: No

**LbCookieStickinessPolicies**

The stickiness policies that are created using `CreateLBCookieStickinessPolicy`.

Type: Array of `AwsElbLbCookieStickinessPolicy (p. 966)` objects

Required: No

**OtherPolicies**

The policies other than the stickiness policies.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElbLoadBalancerSourceSecurityGroup**

Contains information about the security group for the load balancer.

**Contents**

**GroupName**

The name of the security group.

Type: String

Pattern: .\S\.

Required: No

**OwnerAlias**

The owner of the security group.

Type: String

Pattern: .\S\.

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsElbv2LoadBalancerAttribute**

A load balancer attribute.

**Contents**

**Key**

The name of the load balancer attribute.

Type: String

Pattern: .*

Required: No

**Value**

The value of the load balancer attribute.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsElbv2LoadBalancerDetails

Information about a load balancer.

Contents

AvailabilityZones

The Availability Zones for the load balancer.

Type: Array of AvailabilityZone (p. 806) objects

Required: No

CanonicalHostedZoneld

The ID of the Amazon Route 53 hosted zone associated with the load balancer.

Type: String

Pattern: .\S.*

Required: No

CreatedTime

Indicates when the load balancer was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S.*

Required: No

DNSName

The public DNS name of the load balancer.

Type: String

Pattern: .\S.*

Required: No

IpAddressType

The type of IP addresses used by the subnets for your load balancer. The possible values are ipv4 (for IPv4 addresses) and dualstack (for IPv4 and IPv6 addresses).

Type: String

Pattern: .\S.*

Required: No

LoadBalancerAttributes

Attributes of the load balancer.

Type: Array of AwsElbv2LoadBalancerAttribute (p. 986) objects
Required: No

**Scheme**

The nodes of an Internet-facing load balancer have public IP addresses.

Type: String

Pattern: .*\S.*

Required: No

**SecurityGroups**

The IDs of the security groups for the load balancer.

Type: Array of strings

Pattern: .*\S.*

Required: No

**State**

The state of the load balancer.

Type: [LoadBalancerState](p. 989) object

Required: No

**Type**

The type of load balancer.

Type: String

Pattern: .*\S.*

Required: No

**VpcId**

The ID of the VPC for the load balancer.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
LoadBalancerState

Information about the state of the load balancer.

Contents

Code

The state code. The initial state of the load balancer is provisioning.

After the load balancer is fully set up and ready to route traffic, its state is active.

If the load balancer could not be set up, its state is failed.

Type: String
Pattern: .*\S.*
Required: No

Reason

A description of the state.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon EventBridge objects

Amazon EventBridge objects

- AwsEventSchemasRegistryDetails (p. 990)
AwsEventSchemasRegistryDetails

A schema defines the structure of events that are sent to Amazon EventBridge. Schema registries are containers for schemas. They collect and organize schemas so that your schemas are in logical groups.

Contents

Description

A description of the registry to be created.

Type: String
Pattern: .+\S+.+
Required: No

RegistryArn

The Amazon Resource Name (ARN) of the registry.

Type: String
Pattern: .+\S+.+
Required: No

RegistryName

The name of the schema registry.

Type: String
Pattern: .+\S+.+
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon GuardDuty objects

Amazon GuardDuty objects

- AwsGuardDutyDetectorDetails (p. 992)
- AwsGuardDutyDetectorFeaturesDetails (p. 994)
- AwsGuardDutyDetectorDataSourcesCloudTrailDetails (p. 995)
- AwsGuardDutyDetectorDataSourcesDetails (p. 996)
- AwsGuardDutyDetectorDataSourcesDnsLogsDetails (p. 998)
- AwsGuardDutyDetectorDataSourcesFlowLogsDetails (p. 999)
- AwsGuardDutyDetectorDataSourcesKubernetesAuditLogsDetails (p. 1000)
AWS Security Hub API Reference
Amazon GuardDuty objects

- **AwsGuardDutyDetectorDataSourcesKubernetesDetails** (p. 1001)
- **AwsGuardDutyDetectorDataSourcesMalwareProtectionDetails** (p. 1002)
- **AwsGuardDutyDetectorDataSourcesMalwareProtectionScanEc2InstanceWithFindingsDetails** (p. 1003)
- **AwsGuardDutyDetectorDataSourcesMalwareProtectionScanEc2InstanceWithFindingsEbsVolumesDetails** (p. 1004)
- **AwsGuardDutyDetectorDataSourcesS3LogsDetails** (p. 1005)
**AwsGuardDutyDetectorDetails**

Provides details about an Amazon GuardDuty detector. A detector is an object that represents the GuardDuty service. A detector is required for GuardDuty to become operational.

**Contents**

**DataSources**

Describes which data sources are activated for the detector.

Type: `AwsGuardDutyDetectorDataSourcesDetails (p. 996)` object

Required: No

**Features**

Describes which features are activated for the detector.

Type: Array of `AwsGuardDutyDetectorFeaturesDetails (p. 994)` objects

Required: No

**FindingPublishingFrequency**

The publishing frequency of the finding.

Type: String

Pattern: `.*\S.*`

Required: No

**ServiceRole**

The GuardDuty service role.

Type: String

Pattern: `.*\S.*`

Required: No

**Status**

The activation status of the detector.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsGuardDutyDetectorFeaturesDetails

Describes which features are activated for the detector.

Contents

Name

Indicates the name of the feature that is activated for the detector.

Type: String

Pattern: .\S\ .*

Required: No

Status

Indicates the status of the feature that is activated for the detector.

Type: String

Pattern: .\S\ .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsGuardDutyDetectorDataSourcesCloudTrailDetails**

An object that contains information on the status of AWS CloudTrail as a data source for the detector.

**Contents**

**Status**

Specifies whether CloudTrail is activated as a data source for the detector.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)
**AwsGuardDutyDetectorDataSourcesDetails**

Describes which data sources are activated for the detector.

**Contents**

**CloudTrail**

An object that contains information on the status of CloudTrail as a data source for the detector.

Type: [AwsGuardDutyDetectorDataSourcesCloudTrailDetails](p. 995) object

Required: No

**DnsLogs**

An object that contains information on the status of DNS logs as a data source for the detector.

Type: [AwsGuardDutyDetectorDataSourcesDnsLogsDetails](p. 998) object

Required: No

**FlowLogs**

An object that contains information on the status of VPC Flow Logs as a data source for the detector.

Type: [AwsGuardDutyDetectorDataSourcesFlowLogsDetails](p. 999) object

Required: No

**Kubernetes**

An object that contains information on the status of Kubernetes data sources for the detector.

Type: [AwsGuardDutyDetectorDataSourcesKubernetesDetails](p. 1001) object

Required: No

**MalwareProtection**

An object that contains information on the status of Malware Protection as a data source for the detector.

Type: [AwsGuardDutyDetectorDataSourcesMalwareProtectionDetails](p. 1002) object

Required: No

**S3Logs**

An object that contains information on the status of S3 Data event logs as a data source for the detector.

Type: [AwsGuardDutyDetectorDataSourcesS3LogsDetails](p. 1005) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsGuardDutyDetectorDataSourcesDnsLogsDetails**

An object that contains information on the status of DNS logs as a data source for the detector.

**Contents**

**Status**

Describes whether DNS logs is enabled as a data source for the detector.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsGuardDutyDetectorDataSourcesFlowLogsDetails**

An object that contains information on the status of VPC Flow Logs as a data source for the detector.

**Contents**

**Status**

Describes whether VPC Flow Logs are activated as a data source for the detector.

Type: String

Pattern: .+\S+.+

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsGuardDutyDetectorDataSourcesKubernetesAuditLogsDetails**

An object that contains information on the status of Kubernetes audit logs as a data source for the detector.

**Contents**

**Status**

Describes whether Kubernetes audit logs are activated as a data source for the detector.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsGuardDutyDetectorDataSourcesKubernetesDetails**

An object that contains information on the status of Kubernetes data sources for the detector.

**Contents**

**AuditLogs**

Describes whether Kubernetes audit logs are activated as a data source for the detector.

Type: *AwsGuardDutyDetectorDataSourcesKubernetesAuditLogsDetails* (p. 1000) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsGuardDutyDetectorDataSourcesMalwareProtectionDetails**

An object that contains information on the status of Malware Protection as a data source for the detector.

**Contents**

**ScanEc2InstanceWithFindings**

Describes the configuration of Malware Protection for EC2 instances with findings.

Type:  
`AwsGuardDutyDetectorDataSourcesMalwareProtectionScanEc2InstanceWithFindingsDetails (p. 1003)` object

Required: No

**ServiceRole**

The GuardDuty Malware Protection service role.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
Amazon GuardDuty objects

Describes the configuration of Malware Protection for EC2 instances with findings.

Contents

EbsVolumes

Describes the configuration of scanning EBS volumes (Malware Protection) as a data source.

Type:

AwsGuardDutyDetectorDataSourcesMalwareProtectionScanEc2InstanceWithFindingsDetails (p. 1004) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsGuardDutyDetectorDataSourcesMalwareProtectionScanEc2InstanceWithFindingsEbsVolumesDetails**

Describes the configuration of scanning EBS volumes (Malware Protection) as a data source.

**Contents**

**Reason**

Specifies the reason why scanning EBS volumes (Malware Protection) isn't activated as a data source.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Status**

Describes whether scanning EBS volumes is activated as a data source for the detector.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsGuardDutyDetectorDataSourcesS3LogsDetails

An object that contains information on the status of S3 data event logs as a data source for the detector.

Contents

**Status**

A value that describes whether S3 data event logs are automatically enabled for new members of an organization.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS Identity and Access Management (IAM) objects

AWS Identity and Access Management (IAM) objects

- AwsIamAccessKeyDetails (p. 1006)
- AwsIamAccessKeySessionContext (p. 1008)
- AwsIamAccessKeySessionContextAttributes (p. 1009)
- AwsIamAccessKeySessionContextSessionIssuer (p. 1010)
- AwsIamAttachedManagedPolicy (p. 1012)
- AwsIamGroupDetails (p. 1013)
- AwsIamGroupPolicy (p. 1015)
- AwsIamInstanceProfile (p. 1016)
- AwsIamInstanceProfileRole (p. 1018)
- AwsIamPermissionsBoundary (p. 1020)
- AwsIamPolicyDetails (p. 1021)
- AwsIamPolicyVersion (p. 1023)
- AwsIamRoleDetails (p. 1024)
- AwsIamRolePolicy (p. 1026)
- AwsIamUserDetails (p. 1027)
- AwsIamUserPolicy (p. 1029)
**AwsIamAccessKeyDetails**

IAM access key details related to a finding.

**Contents**

**AccessKeyId**

The identifier of the access key.

Type: String

Pattern: .*

Required: No

**AccountId**

The AWS account ID of the account for the key.

Type: String

Pattern: .*

Required: No

**CreatedAt**

Indicates when the IAM access key was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: No

**PrincipalId**

The ID of the principal associated with an access key.

Type: String

Pattern: .*

Required: No

**PrincipalName**

The name of the principal.

Type: String

Pattern: .*

Required: No

**PrincipalType**

The type of principal associated with an access key.

Type: String
Pattern: .*\S.*

Required: No

**SessionContext**

Information about the session that the key was used for.

Type: [AwsIamAccessKeySessionContext](p. 1008) object

Required: No

**Status**

The status of the IAM access key related to a finding.

Type: String

Valid Values: Active | Inactive

Required: No

**UserName**

*This member has been deprecated.*

The user associated with the IAM access key related to a finding.

The UserName parameter has been replaced with the PrincipalName parameter because access keys can also be assigned to principals that are not IAM users.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](aws-sdk-cpp)
- [AWS SDK for Go](aws-sdk-go)
- [AWS SDK for Java V2](aws-sdk-java)
- [AWS SDK for Ruby V3](aws-sdk-ruby)

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**AwsIamAccessKeySessionContext**

Provides information about the session that the key was used for.

**Contents**

**Attributes**

Attributes of the session that the key was used for.

Type: [AwsIamAccessKeySessionContextAttributes](p. 1009) object

Required: No

**SessionIssuer**

Information about the entity that created the session.

Type: [AwsIamAccessKeySessionContextSessionIssuer](p. 1010) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwslamAccessKeySessionContextAttributes

Attributes of the session that the key was used for.

Contents

CreationDate

Indicates when the session was created.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .\S.*
Required: No

MfaAuthenticated

Indicates whether the session used multi-factor authentication (MFA).

Type: Boolean
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwslamAccessKeySessionContextSessionIssuer**

Information about the entity that created the session.

**Contents**

**AccountId**

The identifier of the AWS account that created the session.

Type: String

Pattern: .\S .*

Required: No

**Arn**

The ARN of the session.

Type: String

Pattern: .\S .*

Required: No

**PrincipalId**

The principal ID of the principal (user, role, or group) that created the session.

Type: String

Pattern: .\S .*

Required: No

**Type**

The type of principal (user, role, or group) that created the session.

Type: String

Pattern: .\S .*

Required: No

**UserName**

The name of the principal that created the session.

Type: String

Pattern: .\S .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
AwslamAttachedManagedPolicy

A managed policy that is attached to an IAM principal.

Contents

PolicyArn

The ARN of the policy.

Type: String

Pattern: .*\S.*

Required: No

PolicyName

The name of the policy.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsIamGroupDetails**

Contains details about an IAM group.

**Contents**

**AttachedManagedPolicies**

A list of the managed policies that are attached to the IAM group.

Type: Array of [AwsIamAttachedManagedPolicy (p. 1012)] objects

Required: No

**CreateDate**

Indicates when the IAM group was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**GroupId**

The identifier of the IAM group.

Type: String

Pattern: .*\S.*

Required: No

**GroupName**

The name of the IAM group.

Type: String

Pattern: .*\S.*

Required: No

**GroupPolicyList**

The list of inline policies that are embedded in the group.

Type: Array of [AwsIamGroupPolicy (p. 1015)] objects

Required: No

**Path**

The path to the group.

Type: String

Pattern: .*\S.*

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsIamGroupPolicy**

A managed policy that is attached to the IAM group.

**Contents**

**PolicyName**

The name of the policy.

Type: String

Pattern: . *\S . *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsIamInstanceProfile**

Information about an instance profile.

**Contents**

**Arn**

The ARN of the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**CreateDate**

Indicates when the instance profile was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**InstanceProfileId**

The identifier of the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**InstanceProfileName**

The name of the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**Path**

The path to the instance profile.

Type: String

Pattern: .*\S.*

Required: No

**Roles**

The roles associated with the instance profile.

Type: Array of `AwsIamInstanceProfileRole` objects
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsIamInstanceProfileRole**

Information about a role associated with an instance profile.

**Contents**

**Arn**

The ARN of the role.

Type: String

Pattern: \.*\S.*

Required: No

**AssumeRolePolicyDocument**

The policy that grants an entity permission to assume the role.

Type: String


Pattern: \[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+

Required: No

**CreateDate**

Indicates when the role was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: \.*\S.*

Required: No

**Path**

The path to the role.

Type: String

Pattern: \.*\S.*

Required: No

**RoleId**

The identifier of the role.

Type: String

Pattern: \.*\S.*

Required: No

**RoleName**

The name of the role.
Type: String
Pattern: .\S+. *
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwslamPermissionsBoundary**

Information about the policy used to set the permissions boundary for an IAM principal.

**Contents**

**PermissionsBoundaryArn**

The ARN of the policy used to set the permissions boundary.

Type: String

Pattern: .[^\S].*

Required: No

**PermissionsBoundaryType**

The usage type for the permissions boundary.

Type: String

Pattern: .[^\S].*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsIamPolicyDetails**

Represents an IAM permissions policy.

**Contents**

**AttachmentCount**

The number of users, groups, and roles that the policy is attached to.

Type: Integer

Required: No

**CreateDate**

When the policy was created.

Uses the [date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**DefaultVersionId**

The identifier of the default version of the policy.

Type: String

Pattern: .*\S.*

Required: No

**Description**

A description of the policy.

Type: String

Pattern: .*\S.*

Required: No

**IsAttachable**

Whether the policy can be attached to a user, group, or role.

Type: Boolean

Required: No

**Path**

The path to the policy.

Type: String

Pattern: .*\S.*

Required: No
PermissionsBoundaryUsageCount

The number of users and roles that use the policy to set the permissions boundary.

Type: Integer

Required: No

PolicyId

The unique identifier of the policy.

Type: String

Pattern: . *\S .*

Required: No

PolicyName

The name of the policy.

Type: String

Pattern: . *\S .*

Required: No

PolicyVersionList

List of versions of the policy.

Type: Array of AwsIamPolicyVersion (p. 1023) objects

Required: No

UpdateDate

When the policy was most recently updated.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: . *\S .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwslamPolicyVersion**

A version of an IAM policy.

**Contents**

**CreateDate**

Indicates when the version was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**IsDefaultVersion**

Whether the version is the default version.

- **Type:** Boolean
- **Required:** No

**VersionId**

The identifier of the policy version.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)
**AwsIamRoleDetails**

Contains information about an IAM role, including all of the role's policies.

**Contents**

**AssumeRolePolicyDocument**

The trust policy that grants permission to assume the role.

Type: String


Pattern: `[\u0009\u000A\u000D\u0020-\u007E\u00A1-\u00FF]+`

Required: No

**AttachedManagedPolicies**

The list of the managed policies that are attached to the role.

Type: Array of [AwsIamAttachedManagedPolicy](p. 1012) objects

Required: No

**CreateDate**

Indicates when the role was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: `.*\S.*`

Required: No

**InstanceProfileList**

The list of instance profiles that contain this role.

Type: Array of [AwsIamInstanceProfile](p. 1016) objects

Required: No

**MaxSessionDuration**

The maximum session duration (in seconds) that you want to set for the specified role.

Type: Integer

Required: No

**Path**

The path to the role.

Type: String

Pattern: `.*\S.*`

Required: No
PermissionsBoundary

Information about the policy used to set the permissions boundary for an IAM principal.

Type: [AwsIamPermissionsBoundary (p. 1020)] object

Required: No

RoleId

The stable and unique string identifying the role.

Type: String

Pattern: \.*\S.*

Required: No

RoleName

The friendly name that identifies the role.

Type: String

Pattern: \.*\S.*

Required: No

RolePolicyList

The list of inline policies that are embedded in the role.

Type: Array of [AwsIamRolePolicy (p. 1026)] objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby)
**AwsIamRolePolicy**

An inline policy that is embedded in the role.

**Contents**

**PolicyName**

The name of the policy.

Type: String

Pattern: .\S\.

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsIamUserDetails**

Information about an IAM user.

**Contents**

**AttachedManagedPolicies**

A list of the managed policies that are attached to the user.

Type: Array of `AwsIamAttachedManagedPolicy (p. 1012)` objects

Required: No

**CreateDate**

Indicates when the user was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String

Pattern: `.\S.*`

Required: No

**GroupList**

A list of IAM groups that the user belongs to.

Type: Array of strings

Pattern: `.\S.*`

Required: No

**Path**

The path to the user.

Type: String

Pattern: `.\S.*`

Required: No

**PermissionsBoundary**

The permissions boundary for the user.

Type: `AwsIamPermissionsBoundary (p. 1020)` object

Required: No

**UserId**

The unique identifier for the user.

Type: String

Pattern: `.\S.*`

Required: No
**UserName**

The name of the user.

Type: String

Pattern: .\S\.

Required: No

**UserPolicyList**

The list of inline policies that are embedded in the user.

Type: Array of [AwsIamUserPolicy](p. 1029) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/documentation/sdk-for-cpp/
- [AWS SDK for Go](https://aws.amazon.com/documentation/sdk-for-golang/)
- [AWS SDK for Java V2](https://aws.amazon.com/documentation/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/documentation/sdk-for-ruby/)

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**AwsIamUserPolicy**

Information about an inline policy that is embedded in the user.

**Contents**

**PolicyName**

The name of the policy.

Type: String

Pattern: `.\S .*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Kinesis objects**

**Amazon Kinesis objects**

- [AwsKinesisStreamDetails](#)
- [AwsKinesisStreamStreamEncryptionDetails](#)
**AwsKinesisStreamDetails**

Provides information about an Amazon Kinesis data stream.

**Contents**

**Arn**

The Amazon Resource Name (ARN) of the Kinesis data stream.

Type: String

Pattern: .*\S.*

Required: No

**Name**

The name of the Kinesis stream. If you don't specify a name, CloudFront generates a unique physical ID and uses that ID for the stream name.

Type: String

Pattern: .*\S.*

Required: No

**RetentionPeriodHours**

The number of hours for the data records that are stored in shards to remain accessible.

Type: Integer

Required: No

**ShardCount**

The number of shards that the stream uses.

Type: Integer

Required: No

**StreamEncryption**

When specified, enables or updates server-side encryption using an AWS KMS key for a specified stream. Removing this property from your stack template and updating your stack disables encryption.

Type: *AwsKinesisStreamStreamEncryptionDetails* (p. 1032) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsKinesisStreamStreamEncryptionDetails**

Provides information about stream encryption.

**Contents**

**EncryptionType**

The encryption type to use.

Type: String

Pattern: .*

Required: No

**KeyId**

The globally unique identifier for the customer-managed AWS KMS key to use for encryption.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.dev)
- [AWS SDK for Go](https://aws.dev)
- [AWS SDK for Java V2](https://aws.dev)
- [AWS SDK for Ruby V3](https://aws.dev)

**AWS Key Management Service (AWS KMS) objects**

- [AwsKmsKeyDetails (p. 1033)](https://aws.dev)
**AwsKmsKeyDetails**

Contains metadata about an AWS KMS key.

**Contents**

**AWSAccountId**

The twelve-digit account ID of the AWS account that owns the KMS key.

- Type: String
- Pattern: .*
- Required: No

**CreationDate**

Indicates when the KMS key was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

- Type: Double
- Required: No

**Description**

A description of the KMS key.

- Type: String
- Pattern: .*
- Required: No

**KeyId**

The globally unique identifier for the KMS key.

- Type: String
- Pattern: .*
- Required: No

**KeyManager**

The manager of the KMS key. KMS keys in your AWS account are either customer managed or AWS managed.

- Type: String
- Pattern: .*
- Required: No

**KeyRotationStatus**

Whether the key has key rotation enabled.

- Type: Boolean
Required: No

KeyState

The state of the KMS key. Valid values are as follows:

- Disabled
- Enabled
- PendingDeletion
- PendingImport
- Unavailable

Type: String

Pattern: .*

Required: No

Origin

The source of the KMS key material.

When this value is AWS_KMS, AWS KMS created the key material.

When this value is EXTERNAL, the key material was imported from your existing key management infrastructure or the KMS key lacks key material.

When this value is AWS_CLOUDHSM, the key material was created in the AWS CloudHSM cluster associated with a custom key store.

Type: String

Pattern: .*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS Lambda objects

AWS Lambda objects

- AwsLambdaFunctionDetails (p. 1036)
- AwsLambdaFunctionCode (p. 1040)
- AwsLambdaFunctionDeadLetterConfig (p. 1041)
- AwsLambdaFunctionEnvironment (p. 1042)
- AwsLambdaFunctionEnvironmentError (p. 1043)
- AwsLambdaFunctionLayer (p. 1044)
- AwsLambdaFunctionTracingConfig (p. 1045)
• AwsLambdaFunctionVpcConfig (p. 1046)
• AwsLambdaLayerVersionDetails (p. 1047)
## AwsLambdaFunctionDetails
Details about an AWS Lambda function's configuration.

### Contents

#### Architectures
The instruction set architecture that the function uses. Valid values are x86_64 or arm64.
- **Type:** Array of strings
- **Pattern:** .*
- **Required:** No

#### Code
An `AwsLambdaFunctionCode` object.
- **Type:** `AwsLambdaFunctionCode` (p. 1040) object
- **Required:** No

#### CodeSha256
The SHA256 hash of the function's deployment package.
- **Type:** String
- **Pattern:** .*
- **Required:** No

#### DeadLetterConfig
The function's dead letter queue.
- **Type:** `AwsLambdaFunctionDeadLetterConfig` (p. 1041) object
- **Required:** No

#### Environment
The function's environment variables.
- **Type:** `AwsLambdaFunctionEnvironment` (p. 1042) object
- **Required:** No

#### FunctionName
The name of the function.
- **Type:** String
- **Pattern:** .*
- **Required:** No

#### Handler
The function that Lambda calls to begin executing your function.
- **Type:** String
- **Pattern:** .*

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**KmsKeyArn**

The AWS KMS key that is used to encrypt the function's environment variables. This key is only returned if you've configured a customer managed key.

Type: String

Pattern: .*\S.*

Required: No

**LastModified**

Indicates when the function was last updated.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

**Layers**

The function's layers.

Type: Array of **AwsLambdaFunctionLayer (p. 1044)** objects

Required: No

**MasterArn**

For Lambda@Edge functions, the ARN of the master function.

Type: String

Pattern: .*\S.*

Required: No

**MemorySize**

The memory that is allocated to the function.

Type: Integer

Required: No

**PackageType**

The type of deployment package that's used to deploy the function code to Lambda. Set to Image for a container image and Zip for a .zip file archive.

Type: String

Pattern: .*\S.*

Required: No

**RevisionId**

The latest updated revision of the function or alias.
Type: String
Pattern: .\S+.
Required: No

Role
The function's execution role.
Type: String
Pattern: .\S+.
Required: No

Runtime
The runtime environment for the Lambda function.
Type: String
Pattern: .\S+.
Required: No

Timeout
The amount of time that Lambda allows a function to run before stopping it.
Type: Integer
Required: No

TracingConfig
The function's AWS X-Ray tracing configuration.
Type: AWSLambdaFunctionTracingConfig (p. 1045) object
Required: No

Version
The version of the Lambda function.
Type: String
Pattern: .\S+.
Required: No

VpcConfig
The function's networking configuration.
Type: AWSLambdaFunctionVpcConfig (p. 1046) object
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

* AWS SDK for C++
AWS Security Hub API Reference
AWS Lambda objects

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsLambdaFunctionCode**

The code for the Lambda function. You can specify either an object in Amazon S3, or upload a deployment package directly.

**Contents**

**S3Bucket**

An Amazon S3 bucket in the same AWS Region as your function. The bucket can be in a different AWS account.

Type: String

Pattern: .*\S.*

Required: No

**S3Key**

The Amazon S3 key of the deployment package.

Type: String

Pattern: .*\S.*

Required: No

**S3ObjectVersion**

For versioned objects, the version of the deployment package object to use.

Type: String

Pattern: .*\S.*

Required: No

**ZipFile**

The base64-encoded contents of the deployment package. AWS SDK and AWS CLI clients handle the encoding for you.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsLambdaFunctionDeadLetterConfig

The dead-letter queue for failed asynchronous invocations.

Contents

**TargetArn**

The ARN of an SQS queue or SNS topic.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsLambdaFunctionEnvironment**

A function's environment variable settings.

**Contents**

**Error**

An `AwsLambdaFunctionEnvironmentError` object.

Type: `AwsLambdaFunctionEnvironmentError (p. 1043)` object

Required: No

**Variables**

- Environment variable key-value pairs.
- Type: String to string map
  - Key Pattern: `.\S.*`
  - Value Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsLambdaFunctionEnvironmentError**

Error messages for environment variables that could not be applied.

**Contents**

**ErrorCode**

The error code.

Type: String

Pattern: .\S+. *

Required: No

**Message**

The error message.

Type: String

Pattern: .\S+. *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsLambdaFunctionLayer**

An AWS Lambda layer.

**Contents**

**Arn**

The ARN of the function layer.

Type: String

Pattern: .*\S.*

Required: No

**CodeSize**

The size of the layer archive in bytes.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsLambdaFunctionTracingConfig**

The function's AWS X-Ray tracing configuration.

**Contents**

**Mode**

The tracing mode.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsLambdaFunctionVpcConfig

The VPC security groups and subnets that are attached to a Lambda function.

Contents

SecurityGroupIds

A list of VPC security groups IDs.

Type: Array of strings

Pattern: .\S.*

Required: No

SubnetIds

A list of VPC subnet IDs.

Type: Array of strings

Pattern: .\S.*

Required: No

VpcId

The ID of the VPC.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsLambdaLayerVersionDetails**

Details about a Lambda layer version.

**Contents**

**CompatibleRuntimes**

The layer's compatible runtimes. Maximum number of five items.

Valid values: nodejs10.x | nodejs12.x | java8 | java11 | python2.7 | python3.6 | python3.7 | python3.8 | dotnetcore1.0 | dotnetcore2.1 | go1.x | ruby2.5 | provided

Type: Array of strings

Pattern: .\*\S\.*

Required: No

**CreatedDate**

Indicates when the version was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://www.rfc-editor.org/rfc/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\*\S\.*

Required: No

**Version**

The version number.

Type: Long

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS Network Firewall objects**

**AWS Network Firewall objects**

- [AwsNetworkFirewallFirewallDetails (p. 1049)](#)
- [AwsNetworkFirewallFirewallPolicyDetails (p. 1051)](#)
- [FirewallPolicyDetails (p. 1053)](#)
- [FirewallPolicyStatelessCustomActionsDetails (p. 1055)](#)
• StatelessCustomActionDefinition (p. 1056)
• StatelessCustomPublishMetricAction (p. 1057)
• StatelessCustomPublishMetricActionDimension (p. 1058)
• AwsNetworkFirewallFirewallSubnetMappingsDetails (p. 1059)
• AwsNetworkFirewallRuleGroupDetails (p. 1060)
• RuleGroupDetails (p. 1062)
• RuleGroupSource (p. 1063)
• RuleGroupSourceCustomActionsDetails (p. 1064)
• RuleGroupSourceListDetails (p. 1065)
• RuleGroupSourceStatefulRulesDetails (p. 1066)
• RuleGroupSourceStatefulRulesHeaderDetails (p. 1067)
• RuleGroupSourceStatefulRulesOptionsDetails (p. 1069)
• RuleGroupSourceStatelessRuleDefinition (p. 1070)
• RuleGroupSourceStatelessRuleMatchAttributes (p. 1071)
• RuleGroupSourceStatelessRuleMatchAttributesDestinationPorts (p. 1073)
• RuleGroupSourceStatelessRuleMatchAttributesDestinations (p. 1074)
• RuleGroupSourceStatelessRuleMatchAttributesSourcePorts (p. 1075)
• RuleGroupSourceStatelessRuleMatchAttributesSources (p. 1076)
• RuleGroupSourceStatelessRuleMatchAttributesTcpFlags (p. 1077)
• RuleGroupSourceStatelessRulesAndCustomActionsDetails (p. 1078)
• RuleGroupSourceStatelessRulesDetails (p. 1079)
• RuleGroupVariables (p. 1080)
• RuleGroupVariablesIpSetsDetails (p. 1081)
• RuleGroupVariablesPortSetsDetails (p. 1082)
• NetworkHeader (p. 1083)
• FirewallPolicyStatefulRuleGroupReferencesDetails (p. 1084)
• FirewallPolicyStatelessRuleGroupReferencesDetails (p. 1085)
**AwsNetworkFirewallFirewallDetails**

Details about an AWS Network Firewall firewall.

**Contents**

**DeleteProtection**

Whether the firewall is protected from deletion. If set to `true`, then the firewall cannot be deleted.

Type: Boolean

Required: No

**Description**

A description of the firewall.

Type: String

Pattern: `.*\S.*`

Required: No

**FirewallArn**

The ARN of the firewall.

Type: String

Pattern: `.*\S.*`

Required: No

**FirewallId**

The identifier of the firewall.

Type: String

Pattern: `.*\S.*`

Required: No

**FirewallName**

A descriptive name of the firewall.

Type: String

Pattern: `.*\S.*`

Required: No

**FirewallPolicyArn**

The ARN of the firewall policy.

Type: String

Pattern: `.*\S.*`

Required: No
FirewallPolicyChangeProtection

Whether the firewall is protected from a change to the firewall policy. If set to true, you cannot associate a different policy with the firewall.

Type: Boolean
Required: No

SubnetChangeProtection

Whether the firewall is protected from a change to the subnet associations. If set to true, you cannot map different subnets to the firewall.

Type: Boolean
Required: No

SubnetMappings

The public subnets that Network Firewall uses for the firewall. Each subnet must belong to a different Availability Zone.

Type: Array of `AwsNetworkFirewallFirewallSubnetMappingsDetails (p. 1059)` objects
Required: No

VpcId

The identifier of the VPC where the firewall is used.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsNetworkFirewallFirewallPolicyDetails**

Details about a firewall policy. A firewall policy defines the behavior of a network firewall.

**Contents**

**Description**

A description of the firewall policy.

Type: String

Pattern: .+\S+.+

Required: No

**FirewallPolicy**

The firewall policy configuration.

Type: [FirewallPolicyDetails](#) object

Required: No

**FirewallPolicyArn**

The ARN of the firewall policy.

Type: String

Pattern: .+\S+.+

Required: No

**FirewallPolicyId**

The identifier of the firewall policy.

Type: String

Pattern: .+\S+.+

Required: No

**FirewallPolicyName**

The name of the firewall policy.

Type: String

Pattern: .+\S+.+

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
FirewallPolicyDetails

Defines the behavior of the firewall.

Contents

StatefulRuleGroupReferences

The stateful rule groups that are used in the firewall policy.

Type: Array of FirewallPolicyStatefulRuleGroupReferencesDetails (p. 1084) objects

Required: No

StatelessCustomActions

The custom action definitions that are available to use in the firewall policy's StatelessDefaultActions setting.

Type: Array of FirewallPolicyStatelessCustomActionsDetails (p. 1055) objects

Required: No

StatelessDefaultActions

The actions to take on a packet if it doesn't match any of the stateless rules in the policy.

You must specify a standard action (aws:pass, aws:drop, aws:forward_to_sfe), and can optionally include a custom action from StatelessCustomActions.

Type: Array of strings

Pattern: .[^\S].*

Required: No

StatelessFragmentDefaultActions

The actions to take on a fragmented UDP packet if it doesn't match any of the stateless rules in the policy.

You must specify a standard action (aws:pass, aws:drop, aws:forward_to_sfe), and can optionally include a custom action from StatelessCustomActions.

Type: Array of strings

Pattern: .[^\S].*

Required: No

StatelessRuleGroupReferences

The stateless rule groups that are used in the firewall policy.

Type: Array of FirewallPolicyStatelessRuleGroupReferencesDetails (p. 1085) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
AWS Security Hub API Reference
AWS Network Firewall objects

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FirewallPolicyStatelessCustomActionsDetails

A custom action that can be used for stateless packet handling.

Contents

ActionDefinition

The definition of the custom action.

Type: StatelessCustomActionDefinition (p. 1056) object

Required: No

ActionName

The name of the custom action.

Type: String

Pattern: . * \s . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StatelessCustomActionDefinition

The definition of a custom action that can be used for stateless packet handling.

Contents

PublishMetricAction

Information about metrics to publish to CloudWatch.

Type: StatelessCustomPublishMetricAction (p. 1057) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StatelessCustomPublishMetricAction

Information about metrics to publish to CloudWatch.

Contents

Dimensions

Defines CloudWatch dimension values to publish.

Type: Array of StatelessCustomPublishMetricActionDimension objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
StatelessCustomPublishMetricActionDimension
Defines a CloudWatch dimension value to publish.

Contents

Value

The value to use for the custom metric dimension.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsNetworkFirewallFirewallSubnetMappingsDetails

A public subnet that Network Firewall uses for the firewall.

Contents

SubnetId

The identifier of the subnet

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsNetworkFirewallRuleGroupDetails**

Details about an AWS Network Firewall rule group. Rule groups are used to inspect and control network traffic. Stateless rule groups apply to individual packets. Stateful rule groups apply to packets in the context of their traffic flow.

Rule groups are referenced in firewall policies.

**Contents**

**Capacity**

The maximum number of operating resources that this rule group can use.

Type: Integer

Required: No

**Description**

A description of the rule group.

Type: String

Pattern: .*\S.*

Required: No

**RuleGroup**

Details about the rule group.

Type: [RuleGroupDetails](p. 1062) object

Required: No

**RuleGroupArn**

The ARN of the rule group.

Type: String

Pattern: .*\S.*

Required: No

**RuleGroupId**

The identifier of the rule group.

Type: String

Pattern: .*\S.*

Required: No

**RuleGroupName**

The descriptive name of the rule group.

Type: String

Pattern: .*\S.*

Required: No
Type

The type of rule group. A rule group can be stateful or stateless.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupDetails

Details about the rule group.

Contents

RulesSource

The rules and actions for the rule group.

For stateful rule groups, can contain RulesString, RulesSourceList, or StatefulRules.

For stateless rule groups, contains StatelessRulesAndCustomActions.

Type: RuleGroupSource (p. 1063) object

Required: No

RuleVariables

Additional settings to use in the specified rules.

Type: RuleGroupVariables (p. 1080) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSource

The rules and actions for the rule group.

Contents

RulesSourceList

Stateful inspection criteria for a domain list rule group. A domain list rule group determines access by specific protocols to specific domains.

Type: RuleGroupSourceListDetails (p. 1065) object

Required: No

RulesString

Stateful inspection criteria, provided in Suricata compatible intrusion prevention system (IPS) rules.

Type: String

Pattern: .*\S.*

Required: No

StatefulRules

Suricata rule specifications.

Type: Array of RuleGroupSourceStatefulRulesDetails (p. 1066) objects

Required: No

StatelessRulesAndCustomActions

The stateless rules and custom actions used by a stateless rule group.

Type: RuleGroupSourceStatelessRulesAndCustomActionsDetails (p. 1078) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceCustomActionsDetails

A custom action definition. A custom action is an optional, non-standard action to use for stateless packet handling.

Contents

ActionDefinition

The definition of a custom action.

Type: StatelessCustomActionDefinition (p. 1056) object

Required: No

ActionName

A descriptive name of the custom action.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceListDetails

Stateful inspection criteria for a domain list rule group.

Contents

GeneratedRulesType

Indicates whether to allow or deny access to the domains listed in Targets.

Type: String

Pattern: .\S.*

Required: No

Targets

The domains that you want to inspect for in your traffic flows. You can provide full domain names, or use the '.' prefix as a wildcard. For example, .example.com matches all domains that end with example.com.

Type: Array of strings

Pattern: .\S.*

Required: No

TargetTypes

The protocols that you want to inspect. Specify LS_SNI for HTTPS. Specify HTTP_HOST for HTTP. You can specify either or both.

Type: Array of strings

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatefulRulesDetails

A Suricata rule specification.

Contents

Action

Defines what Network Firewall should do with the packets in a traffic flow when the flow matches the stateful rule criteria.

Type: String  
Pattern: .*\S.*  
Required: No

Header

The stateful inspection criteria for the rule.

Type: RuleGroupSourceStatefulRulesHeaderDetails (p. 1067) object  
Required: No

RuleOptions

Additional options for the rule.

Type: Array of RuleGroupSourceStatefulRulesOptionsDetails (p. 1069) objects  
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatefulRulesHeaderDetails

The inspection criteria for a stateful rule.

Contents

Destination

The destination IP address or address range to inspect for, in CIDR notation. To match with any address, specify ANY.

Type: String

Pattern: .*\S.*

Required: No

DestinationPort

The destination port to inspect for. You can specify an individual port, such as 1994. You also can specify a port range, such as 1990:1994. To match with any port, specify ANY.

Type: String

Pattern: .*\S.*

Required: No

Direction

The direction of traffic flow to inspect. If set to ANY, the inspection matches bidirectional traffic, both from the source to the destination and from the destination to the source. If set to FORWARD, the inspection only matches traffic going from the source to the destination.

Type: String

Pattern: .*\S.*

Required: No

Protocol

The protocol to inspect for. To inspector for all protocols, use IP.

Type: String

Pattern: .*\S.*

Required: No

Source

The source IP address or address range to inspect for, in CIDR notation. To match with any address, specify ANY.

Type: String

Pattern: .*\S.*

Required: No

SourcePort

The source port to inspect for. You can specify an individual port, such as 1994. You also can specify a port range, such as 1990:1994. To match with any port, specify ANY.
Type: String

Pattern: .*\$.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatefulRulesOptionsDetails

A rule option for a stateful rule.

Contents

Keyword

A keyword to look for.

Type: String

Pattern: .*\S.*

Required: No

Settings

A list of settings.

Type: Array of strings

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRuleDefinition

The definition of the stateless rule.

Contents

Actions

The actions to take on a packet that matches one of the stateless rule definition's match attributes. You must specify a standard action (aws:pass, aws:drop, or aws:forward_to_sfe). You can then add custom actions.

Type: Array of strings

Pattern: .*\S.*

Required: No

MatchAttributes

The criteria for Network Firewall to use to inspect an individual packet in a stateless rule inspection.

Type: RuleGroupSourceStatelessRuleMatchAttributes (p. 1071) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRuleMatchAttributes
Criteria for the stateless rule.

Contents

DestinationPorts
A list of port ranges to specify the destination ports to inspect for.
Type: Array of RuleGroupSourceStatelessRuleMatchAttributesDestinationPorts (p. 1073) objects
Required: No

Destinations
The destination IP addresses and address ranges to inspect for, in CIDR notation.
Type: Array of RuleGroupSourceStatelessRuleMatchAttributesDestinations (p. 1074) objects
Required: No

Protocols
The protocols to inspect for.
Type: Array of integers
Required: No

SourcePorts
A list of port ranges to specify the source ports to inspect for.
Type: Array of RuleGroupSourceStatelessRuleMatchAttributesSourcePorts (p. 1075) objects
Required: No

Sources
The source IP addresses and address ranges to inspect for, in CIDR notation.
Type: Array of RuleGroupSourceStatelessRuleMatchAttributesSources (p. 1076) objects
Required: No

TcpFlags
The TCP flags and masks to inspect for.
Type: Array of RuleGroupSourceStatelessRuleMatchAttributesTcpFlags (p. 1077) objects
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRuleMatchAttributesDestinationPorts

A port range to specify the destination ports to inspect for.

Contents

FromPort

The starting port value for the port range.

Type: Integer

Required: No

ToPort

The ending port value for the port range.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRuleMatchAttributesDestinations

A destination IP address or range.

Contents

AddressDefinition

An IP address or a block of IP addresses.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRuleMatchAttributesSourcePorts

A port range to specify the source ports to inspect for.

Contents

FromPort

The starting port value for the port range.

Type: Integer

Required: No

ToPort

The ending port value for the port range.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
RuleGroupSourceStatelessRuleMatchAttributesSources

A source IP addresses and address range to inspect for.

Contents

AddressDefinition

An IP address or a block of IP addresses.

Type: String

Pattern: \S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**RuleGroupSourceStatelessRuleMatchAttributesTcpFlags**

A set of TCP flags and masks to inspect for.

**Contents**

**Flags**

Defines the flags from the Masks setting that must be set in order for the packet to match. Flags that are listed must be set. Flags that are not listed must not be set.

- **Type:** Array of strings
- **Pattern:** .*\S.*
- **Required:** No

**Masks**

The set of flags to consider in the inspection. If not specified, then all flags are inspected.

- **Type:** Array of strings
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRulesAndCustomActionsDetails

Stateless rules and custom actions for a stateless rule group.

Contents

CustomActions

Custom actions for the rule group.

Type: Array of RuleGroupSourceCustomActionsDetails objects

Required: No

StatelessRules

Stateless rules for the rule group.

Type: Array of RuleGroupSourceStatelessRulesDetails objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupSourceStatelessRulesDetails

A stateless rule in the rule group.

Contents

Priority

Indicates the order in which to run this rule relative to all of the rules in the stateless rule group.

Type: Integer

Required: No

RuleDefinition

Provides the definition of the stateless rule.

Type: RuleGroupSourceStatelessRuleDefinition (p. 1070) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupVariables

Additional settings to use in the specified rules.

Contents

IpSets

A list of IP addresses and address ranges, in CIDR notation.

Type: RuleGroupVariablesIpSetsDetails (p. 1081) object

Required: No

PortSets

A list of port ranges.

Type: RuleGroupVariablesPortSetsDetails (p. 1082) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupVariablesIpSetsDetails

A list of IP addresses and address ranges, in CIDR notation.

Contents

Definition

The list of IP addresses and ranges.

Type: Array of strings

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
RuleGroupVariablesPortSetsDetails

A list of port ranges.

Contents

Definition

The list of port ranges.

Type: Array of strings

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NetworkHeader
Details about a network path component that occurs before or after the current component.

Contents

Destination
Information about the destination of the component.
Type: NetworkPathComponentDetails (p. 476) object
Required: No

Protocol
The protocol used for the component.
Type: String
Pattern: .*\S.*
Required: No

Source
Information about the origin of the component.
Type: NetworkPathComponentDetails (p. 476) object
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FirewallPolicyStatefulRuleGroupReferencesDetails

A stateful rule group that is used by the firewall policy.

Contents

ResourceArn

The ARN of the stateful rule group.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FirewallPolicyStatelessRuleGroupReferencesDetails

A stateless rule group that is used by the firewall policy.

Contents

Priority

The order in which to run the stateless rule group.

Type: Integer

Required: No

ResourceArn

The ARN of the stateless rule group.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon OpenSearch Service

Amazon OpenSearch Service objects

- AwsOpenSearchServiceDomainAdvancedSecurityOptionsDetails (p. 1086)
- AwsOpenSearchServiceDomainClusterConfigDetails (p. 1087)
- AwsOpenSearchServiceDomainClusterConfigZoneAwarenessConfigDetails (p. 1089)
- AwsOpenSearchServiceDomainDetails (p. 1090)
- AwsOpenSearchServiceDomainDomainEndpointOptionsDetails (p. 1093)
- AwsOpenSearchServiceDomainEncryptionAtRestOptionsDetails (p. 1094)
- AwsOpenSearchServiceDomainLogPublishingOption (p. 1095)
- AwsOpenSearchServiceDomainLogPublishingOptionsDetails (p. 1096)
- AwsOpenSearchServiceDomainMasterUserOptionsDetails (p. 1097)
- AwsOpenSearchServiceDomainNodeToNodeEncryptionOptionsDetails (p. 1098)
- AwsOpenSearchServiceDomainServiceSoftwareOptionsDetails (p. 1099)
- AwsOpenSearchServiceDomainVpcOptionsDetails (p. 1101)
**AwsOpenSearchServiceDomainAdvancedSecurityOptionsDetails**

Provides information about domain access control options.

**Contents**

**Enabled**

Enables fine-grained access control.

Type: Boolean

Required: No

**InternalUserDatabaseEnabled**

Enables the internal user database.

Type: Boolean

Required: No

**MasterUserOptions**

Specifies information about the master user of the domain.

Type: *AwsOpenSearchServiceDomainMasterUserOptionsDetails (p. 1097)* object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsOpenSearchServiceDomainClusterConfigDetails

Details about the configuration of an OpenSearch cluster.

Contents

DedicatedMasterCount

The number of instances to use for the master node. If this attribute is specified, then DedicatedMasterEnabled must be true.

Type: Integer
Required: No

DedicatedMasterEnabled

Whether to use a dedicated master node for the OpenSearch domain. A dedicated master node performs cluster management tasks, but does not hold data or respond to data upload requests.

Type: Boolean
Required: No

DedicatedMasterType

The hardware configuration of the computer that hosts the dedicated master node.

If this attribute is specified, then DedicatedMasterEnabled must be true.

Type: String
Pattern: .*\S.*
Required: No

InstanceCount

The number of data nodes to use in the OpenSearch domain.

Type: Integer
Required: No

InstanceType

The instance type for your data nodes.

For a list of valid values, see Supported instance types in Amazon OpenSearch Service in the Amazon OpenSearch Service Developer Guide.

Type: String
Pattern: .*\S.*
Required: No

WarmCount

The number of UltraWarm instances.

Type: Integer
Required: No
**WarmEnabled**

Whether UltraWarm is enabled.

Type: Boolean

Required: No

**WarmType**

The type of UltraWarm instance.

Type: String

Pattern: .\S.*

Required: No

**ZoneAwarenessConfig**

Configuration options for zone awareness. Provided if ZoneAwarenessEnabled is true.

Type: [AwsOpenSearchServiceDomainClusterConfigZoneAwarenessConfigDetails](p. 1089) object

Required: No

**ZoneAwarenessEnabled**

Whether to enable zone awareness for the OpenSearch domain. When zone awareness is enabled, OpenSearch Service allocates the cluster's nodes and replica index shards across Availability Zones (AZs) in the same Region. This prevents data loss and minimizes downtime if a node or data center fails.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsOpenSearchServiceDomainClusterConfigZoneAwarenessConfigDetails

Configuration options for zone awareness.

Contents

AvailabilityZoneCount

The number of Availability Zones that the domain uses. Valid values are 2 or 3. The default is 2.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsOpenSearchServiceDomainDetails**

Information about an Amazon OpenSearch Service domain.

**Contents**

**AccessPolicies**

IAM policy document that specifies the access policies for the OpenSearch Service domain.

- **Type:** String
- **Pattern:** .^\S.*
- **Required:** No

**AdvancedSecurityOptions**

Specifies options for fine-grained access control.

- **Type:** [AwsOpenSearchServiceDomainAdvancedSecurityOptionsDetails](p. 1086)
- **Required:** No

**Arn**

The ARN of the OpenSearch Service domain.

- **Type:** String
- **Pattern:** .^\S.*
- **Required:** No

**ClusterConfig**

Details about the configuration of an OpenSearch cluster.

- **Type:** [AwsOpenSearchServiceDomainClusterConfigDetails](p. 1087)
- **Required:** No

**DomainEndpoint**

The domain endpoint.

- **Type:** String
- **Pattern:** .^\S.*
- **Required:** No

**DomainEndpointOptions**

Additional options for the domain endpoint.

- **Type:** [AwsOpenSearchServiceDomainDomainEndpointOptionsDetails](p. 1093)
- **Required:** No

**DomainEndpoints**

The domain endpoints. Used if the OpenSearch domain resides in a VPC.

This is a map of key-value pairs. The key is always vpc. The value is the endpoint.
Type: String to string map
Key Pattern: .*\S.*
Value Pattern: .*\S.*
Required: No

DomainName
The name of the endpoint.
Type: String
Pattern: .*\S.*
Required: No

EncryptionAtRestOptions
Details about the configuration for encryption at rest.
Type: `AwsOpenSearchServiceDomainEncryptionAtRestOptionsDetails (p. 1094)` object
Required: No

EngineVersion
The version of the domain engine.
Type: String
Pattern: .*\S.*
Required: No

Id
The identifier of the domain.
Type: String
Pattern: .*\S.*
Required: No

LogPublishingOptions
Configures the CloudWatch Logs to publish for the OpenSearch domain.
Type: `AwsOpenSearchServiceDomainLogPublishingOptionsDetails (p. 1096)` object
Required: No

NodeToNodeEncryptionOptions
Details about the configuration for node-to-node encryption.
Type: `AwsOpenSearchServiceDomainNodeToNodeEncryptionOptionsDetails (p. 1098)` object
Required: No

ServiceSoftwareOptions
Information about the status of a domain relative to the latest service software.
Type: `AwsOpenSearchServiceDomainServiceSoftwareOptionsDetails (p. 1099)` object
Required: No

**VpcOptions**

Information that OpenSearch Service derives based on VPCOptions for the domain.

Type: [AwsOpenSearchServiceDomainVpcOptionsDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsOpenSearchServiceDomainDomainEndpointOptionsDetails**

Information about additional options for the domain endpoint.

**Contents**

**CustomEndpoint**

The fully qualified URL for the custom endpoint.

Type: String

Pattern: .\S.*

Required: No

**CustomEndpointCertificateArn**

The ARN for the security certificate. The certificate is managed in ACM.

Type: String

Pattern: .\S.*

Required: No

**CustomEndpointEnabled**

Whether to enable a custom endpoint for the domain.

Type: Boolean

Required: No

**EnforceHTTPS**

Whether to require that all traffic to the domain arrive over HTTPS.

Type: Boolean

Required: No

**TLSSecurityPolicy**

The TLS security policy to apply to the HTTPS endpoint of the OpenSearch domain.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsOpenSearchServiceDomainEncryptionAtRestOptionsDetails**

Details about the configuration for encryption at rest for the OpenSearch domain.

**Contents**

**Enabled**

Whether encryption at rest is enabled.

Type: Boolean

Required: No

**KmsKeyId**

The KMS key ID.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsOpenSearchServiceDomainLogPublishingOption

Configuration details for a log publishing option.

Contents

CloudWatchLogsLogGroupArn

The ARN of the CloudWatch Logs group to publish the logs to.

Type: String

Pattern: .*\S.*

Required: No

Enabled

Whether the log publishing is enabled.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsOpenSearchServiceDomainLogPublishingOptionsDetails**

Configures the CloudWatch Logs to publish for the OpenSearch domain.

**Contents**

**AuditLogs**

Configures the OpenSearch audit logs publishing.

Type: [AwsOpenSearchServiceDomainLogPublishingOption](p. 1095) object

Required: No

**IndexSlowLogs**

Configures the OpenSearch index logs publishing.

Type: [AwsOpenSearchServiceDomainLogPublishingOption](p. 1095) object

Required: No

**SearchSlowLogs**

Configures the OpenSearch search slow log publishing.

Type: [AwsOpenSearchServiceDomainLogPublishingOption](p. 1095) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsOpenSearchServiceDomainMasterUserOptionsDetails**

Specifies information about the master user of the domain.

**Contents**

**MasterUserArn**

The Amazon Resource Name (ARN) for the master user.

Type: String

Pattern: .*\S.*

Required: No

**MasterUserName**

The username for the master user.

Type: String

Pattern: .*\S.*

Required: No

**MasterUserPassword**

The password for the master user.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsOpenSearchServiceDomainNodeToNodeEncryptionOptionsDetails**

Provides details about the configuration for node-to-node encryption.

**Contents**

**Enabled**

Whether node-to-node encryption is enabled.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsOpenSearchServiceDomainServiceSoftwareOptionsDetails**

Provides information about the state of the domain relative to the latest service software.

**Contents**

AutomatedUpdateDate

The epoch time when the deployment window closes for required updates. After this time, OpenSearch Service schedules the software upgrade automatically.

Type: String

Pattern: .*\S.*

Required: No

Cancellable

Whether a request to update the domain can be canceled.

Type: Boolean

Required: No

CurrentVersion

The version of the service software that is currently installed on the domain.

Type: String

Pattern: .*\S.*

Required: No

Description

A more detailed description of the service software status.

Type: String

Pattern: .*\S.*

Required: No

NewVersion

The most recent version of the service software.

Type: String

Pattern: .*\S.*

Required: No

OptionalDeployment

Whether the service software update is optional.

Type: Boolean

Required: No

UpdateAvailable

Whether a service software update is available for the domain.
**UpdateStatus**

The status of the service software update. Valid values are as follows:
- COMPLETED
- ELIGIBLE
- IN_PROGRESS
- NOT_ELIGIBLE
- PENDING_UPDATE

Type: String
Pattern: .*\S.*
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsOpenSearchServiceDomainVpcOptionsDetails**

Contains information that OpenSearch Service derives based on the VPC Options for the domain.

### Contents

**SecurityGroupIds**

The list of security group IDs that are associated with the VPC endpoints for the domain.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**SubnetIds**

A list of subnet IDs that are associated with the VPC endpoints for the domain.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

### Amazon Relational Database Service (RDS) objects

**Amazon Relational Database Service (RDS) objects**

- [AwsRdsDbClusterAssociatedRole](p. 1103)
- [AwsRdsDbClusterDetails](p. 1104)
- [AwsRdsDbClusterMember](p. 1110)
- [AwsRdsDbClusterOptionGroupMembership](p. 1111)
- [AwsRdsDbClusterSnapshotDbClusterSnapshotAttribute](p. 1112)
- [AwsRdsDbClusterSnapshotDetails](p. 1113)
- [AwsRdsDbDomainMembership](p. 1117)
- [AwsRdsDbInstanceAssociatedRole](p. 1118)
- [AwsRdsDbInstanceDetails](p. 1119)
- [AwsRdsDbInstanceEndpoint](p. 1128)
- [AwsRdsDbInstanceVpcSecurityGroup](p. 1129)
- [AwsRdsDbOptionGroupMembership](p. 1130)
- [AwsRdsDbParameterGroup](p. 1131)
- [AwsRdsDbPendingModifiedValues](p. 1132)
- **AwsRdsDbProcessorFeature** (p. 1135)
- **AwsRdsDbSecurityGroupDetails** (p. 1136)
- **AwsRdsDbSecurityGroupEc2SecurityGroup** (p. 1138)
- **AwsRdsDbSecurityGroupIpRange** (p. 1139)
- **AwsRdsDbSnapshotDetails** (p. 1140)
- **AwsRdsDbStatusInfo** (p. 1145)
- **AwsRdsDbSubnetGroup** (p. 1146)
- **AwsRdsDbSubnetGroupSubnet** (p. 1148)
- **AwsRdsDbSubnetGroupSubnetAvailabilityZone** (p. 1149)
- **AwsRdsEventSubscriptionDetails** (p. 1150)
- **AwsRdsPendingCloudWatchLogsExports** (p. 1152)
AWS RDS DB Cluster Associated Role

An IAM role that is associated with the Amazon RDS DB cluster.

Contents

RoleArn

The ARN of the IAM role.

Type: String

Pattern: .*\S.*

Required: No

Status

The status of the association between the IAM role and the DB cluster. Valid values are as follows:

- ACTIVE
- INVALID
- PENDING

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbClusterDetails**

Information about an Amazon RDS DB cluster.

**Contents**

**ActivityStreamStatus**

The status of the database activity stream. Valid values are as follows:

- `started`
- `starting`
- `stopped`
- `stopping`

Type: String

Pattern: `.\S.*`

Required: No

**AllocatedStorage**

For all database engines except Aurora, specifies the allocated storage size in gibibytes (GiB).

Type: Integer

Required: No

**AssociatedRoles**

A list of the IAM roles that are associated with the DB cluster.

Type: Array of `AwsRdsDbClusterAssociatedRole` objects

Required: No

**AvailabilityZones**

A list of Availability Zones (AZs) where instances in the DB cluster can be created.

Type: Array of strings

Pattern: `.\S.*`

Required: No

**BackupRetentionPeriod**

The number of days for which automated backups are retained.

Type: Integer

Required: No

**ClusterCreateTime**

Indicates when the DB cluster was created, in Universal Coordinated Time (UTC).

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String
Pattern: .\S.*
Required: No

**CopyTagsToSnapshot**

Whether tags are copied from the DB cluster to snapshots of the DB cluster.
Type: Boolean
Required: No

**CrossAccountClone**

Whether the DB cluster is a clone of a DB cluster owned by a different AWS account.
Type: Boolean
Required: No

**CustomEndpoints**

A list of custom endpoints for the DB cluster.
Type: Array of strings
Pattern: .\S.*
Required: No

**DatabaseName**

The name of the database.
Type: String
Pattern: .\S.*
Required: No

**DbClusterIdentifier**

The DB cluster identifier that the user assigned to the cluster. This identifier is the unique key that identifies a DB cluster.
Type: String
Pattern: .\S.*
Required: No

**DbClusterMembers**

The list of instances that make up the DB cluster.
Type: Array of *AwsRdsDbClusterMember (p. 1110)* objects
Required: No

**DbClusterOptionGroupMemberships**

The list of option group memberships for this DB cluster.
Type: Array of *AwsRdsDbClusterOptionGroupMembership (p. 1111)* objects
Required: No
DbClusterParameterGroup

The name of the DB cluster parameter group for the DB cluster.

Type: String

Pattern: .*\S.*

Required: No

DbClusterResourceId

The identifier of the DB cluster. The identifier must be unique within each AWS Region and is immutable.

Type: String

Pattern: .*\S.*

Required: No

DbSubnetGroup

The subnet group that is associated with the DB cluster, including the name, description, and subnets in the subnet group.

Type: String

Pattern: .*\S.*

Required: No

DeletionProtection

Whether the DB cluster has deletion protection enabled.

Type: Boolean

Required: No

DomainMemberships

The Active Directory domain membership records that are associated with the DB cluster.

Type: Array of AwsRdsDbDomainMembership (p. 1117) objects

Required: No

EnabledCloudWatchLogsExports

A list of log types that this DB cluster is configured to export to CloudWatch Logs.

Type: Array of strings

Pattern: .*\S.*

Required: No

Endpoint

The connection endpoint for the primary instance of the DB cluster.

Type: String

Pattern: .*\S.*
Required: No

**Engine**

The name of the database engine to use for this DB cluster. Valid values are as follows:
- `aurora`
- `aurora-mysql`
- `aurora-postgresql`

Type: String

Pattern: \S.*

Required: No

**EngineMode**

The database engine mode of the DB cluster. Valid values are as follows:
- `global`
- `multimaster`
- `parallelquery`
- `provisioned`
- `serverless`

Type: String

Pattern: \S.*

Required: No

**EngineVersion**

The version number of the database engine to use.

Type: String

Pattern: \S.*

Required: No

**HostedZoneId**

Specifies the identifier that Amazon Route 53 assigns when you create a hosted zone.

Type: String

Pattern: \S.*

Required: No

**HttpEndpointEnabled**

Whether the HTTP endpoint for an Aurora Serverless DB cluster is enabled.

Type: Boolean

Required: No

**IamDatabaseAuthenticationEnabled**

Whether the mapping of IAM accounts to database accounts is enabled.

Type: Boolean
Required: No

**KmsKeyId**

The ARN of the AWS KMS master key that is used to encrypt the database instances in the DB cluster.

Type: String

Pattern: .\S.*

Required: No

**MasterUsername**

The name of the master user for the DB cluster.

Type: String

Pattern: .\S.*

Required: No

**MultiAz**

Whether the DB cluster has instances in multiple Availability Zones.

Type: Boolean

Required: No

**Port**

The port number on which the DB instances in the DB cluster accept connections.

Type: Integer

Required: No

**PreferredBackupWindow**

The range of time each day when automated backups are created, if automated backups are enabled.

Uses the format HH:MM-HH:MM. For example, 04:52-05:22.

Type: String

Pattern: .\S.*

Required: No

**PreferredMaintenanceWindow**

The weekly time range during which system maintenance can occur, in Universal Coordinated Time (UTC).

Uses the format <day>:HH:MM-<day>:HH:MM.

For the day values, use mon|tue|wed|thu|fri|sat|sun.

For example, sun:09:32-sun:10:02.

Type: String

Pattern: .\S.*
Required: No

**ReaderEndpoint**

The reader endpoint for the DB cluster.

Type: String

Pattern: .*\S.*

Required: No

**ReadReplicaIdentifiers**

The identifiers of the read replicas that are associated with this DB cluster.

Type: Array of strings

Pattern: .*\S.*

Required: No

**Status**

The current status of this DB cluster.

Type: String

Pattern: .*\S.*

Required: No

**StorageEncrypted**

Whether the DB cluster is encrypted.

Type: Boolean

Required: No

**VpcSecurityGroups**

A list of VPC security groups that the DB cluster belongs to.

Type: Array of `AwsRdsDbInstanceVpcSecurityGroup (p. 1129)` objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbClusterMember**

Information about an instance in the DB cluster.

**Contents**

**DbClusterParameterGroupStatus**

The status of the DB cluster parameter group for this member of the DB cluster.

Type: String

Pattern: .*

Required: No

**DbInstanceIdentifier**

The instance identifier for this member of the DB cluster.

Type: String

Pattern: .*

Required: No

**IsClusterWriter**

Whether the cluster member is the primary instance for the DB cluster.

Type: Boolean

Required: No

**PromotionTier**

 Specifies the order in which an Aurora replica is promoted to the primary instance when the existing primary instance fails.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsRdsDbClusterOptionGroupMembership

Information about an option group membership for a DB cluster.

Contents

DbClusterOptionGroupName

The name of the DB cluster option group.

Type: String

Pattern: .+\S+.+

Required: No

Status

The status of the DB cluster option group.

Type: String

Pattern: .+\S+.+

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbClusterSnapshotDbClusterSnapshotAttribute**

Contains the name and values of a manual Amazon Relational Database Service (RDS) DB cluster snapshot attribute.

**Contents**

**AttributeName**

The name of the manual DB cluster snapshot attribute. The attribute named `restore` refers to the list of AWS accounts that have permission to copy or restore the manual DB cluster snapshot.

Type: String

Pattern: .*

Required: No

**AttributeValue**

The value(s) for the manual DB cluster snapshot attribute. If the `AttributeName` field is set to `restore`, then this element returns a list of IDs of the AWS accounts that are authorized to copy or restore the manual DB cluster snapshot. If a value of `all` is in the list, then the manual DB cluster snapshot is public and available for any AWS account to copy or restore.

Type: Array of strings

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbClusterSnapshotDetails**

Information about an Amazon RDS DB cluster snapshot.

**Contents**

**AllocatedStorage**

Specifies the allocated storage size in gibibytes (GiB).

Type: Integer

Required: No

**AvailabilityZones**

A list of Availability Zones where instances in the DB cluster can be created.

Type: Array of strings

Pattern: .\S.*

Required: No

**ClusterCreateTime**

Indicates when the DB cluster was created, in Universal Coordinated Time (UTC).

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .\S.*

Required: No

**DbClusterIdentifier**

The DB cluster identifier.

Type: String

Pattern: .\S.*

Required: No

**DbClusterSnapshotAttributes**

Contains the name and values of a manual DB cluster snapshot attribute.

Type: Array of [AwsRdsDbClusterSnapshotDbClusterSnapshotAttribute (p. 1112)] objects

Required: No

**DbClusterSnapshotIdentifier**

The identifier of the DB cluster snapshot.

Type: String

Pattern: .\S.*

Required: No
**Engine**

The name of the database engine that you want to use for this DB instance.

Type: String

Pattern: .*\S.*

Required: No

**EngineVersion**

The version of the database engine to use.

Type: String

Pattern: .*\S.*

Required: No

**IamDatabaseAuthenticationEnabled**

Whether mapping of IAM accounts to database accounts is enabled.

Type: Boolean

Required: No

**KmsKeyId**

The ARN of the AWS KMS master key that is used to encrypt the database instances in the DB cluster.

Type: String

Pattern: .*\S.*

Required: No

**LicenseModel**

The license model information for this DB cluster snapshot.

Type: String

Pattern: .*\S.*

Required: No

**MasterUsername**

The name of the master user for the DB cluster.

Type: String

Pattern: .*\S.*

Required: No

**PercentProgress**

Specifies the percentage of the estimated data that has been transferred.

Type: Integer

Required: No
Port

The port number on which the DB instances in the DB cluster accept connections.

Type: Integer
Required: No

SnapshotCreateTime

Indicates when the snapshot was taken.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

SnapshotType

The type of DB cluster snapshot.

Type: String
Pattern: .*\S.*
Required: No

Status

The status of this DB cluster snapshot.

Type: String
Pattern: .*\S.*
Required: No

StorageEncrypted

Whether the DB cluster is encrypted.

Type: Boolean
Required: No

VpcId

The VPC ID that is associated with the DB cluster snapshot.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsRdsDbDomainMembership**

Information about an Active Directory domain membership record associated with the DB instance.

**Contents**

**Domain**

The identifier of the Active Directory domain.

Type: String

Pattern: .*\S.*

Required: No

**Fqdn**

The fully qualified domain name of the Active Directory domain.

Type: String

Pattern: .*\S.*

Required: No

**IamRoleName**

The name of the IAM role to use when making API calls to the Directory Service.

Type: String

Pattern: .*\S.*

Required: No

**Status**

The status of the Active Directory Domain membership for the DB instance.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

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**AwsRdsDbInstanceAssociatedRole**

An IAM role associated with the DB instance.

**Contents**

**FeatureName**

The name of the feature associated with the IAM role.

Type: String

Pattern: .*\S.*

Required: No

**RoleArn**

The ARN of the IAM role that is associated with the DB instance.

Type: String

Pattern: .*\S.*

Required: No

**Status**

Describes the state of the association between the IAM role and the DB instance. The Status property returns one of the following values:

- **ACTIVE** - The IAM role ARN is associated with the DB instance and can be used to access other AWS services on your behalf.
- **PENDING** - The IAM role ARN is being associated with the DB instance.
- **INVALID** - The IAM role ARN is associated with the DB instance. But the DB instance is unable to assume the IAM role in order to access other AWS services on your behalf.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbInstanceDetails**

Contains the details of an Amazon RDS DB instance.

**Contents**

**AllocatedStorage**

The amount of storage (in gigabytes) to initially allocate for the DB instance.

Type: Integer

Required: No

**AssociatedRoles**

The IAM roles associated with the DB instance.

Type: Array of *AwsRdsDbInstanceAssociatedRole* objects

Required: No

**AutoMinorVersionUpgrade**

Indicates whether minor version patches are applied automatically.

Type: Boolean

Required: No

**AvailabilityZone**

The Availability Zone where the DB instance will be created.

Type: String

Pattern: ..*$

Required: No

**BackupRetentionPeriod**

The number of days for which to retain automated backups.

Type: Integer

Required: No

**CACertificateIdentifier**

The identifier of the CA certificate for this DB instance.

Type: String

Pattern: ..*$

Required: No

**CharacterSetName**

The name of the character set that this DB instance is associated with.

Type: String

Pattern: ..*$
**CopyTagsToSnapshot**

Whether to copy resource tags to snapshots of the DB instance.

- Type: Boolean
- Required: No

**DBClusterIdentifier**

If the DB instance is a member of a DB cluster, contains the name of the DB cluster that the DB instance is a member of.

- Type: String
- Pattern: .*
- Required: No

**DBInstanceClass**

Contains the name of the compute and memory capacity class of the DB instance.

- Type: String
- Pattern: .*
- Required: No

**DBInstanceIdentifier**

Contains a user-supplied database identifier. This identifier is the unique key that identifies a DB instance.

- Type: String
- Pattern: .*
- Required: No

**DbInstancePort**

 Specifies the port that the DB instance listens on. If the DB instance is part of a DB cluster, this can be a different port than the DB cluster port.

- Type: Integer
- Required: No

**DbInstanceStatus**

The current status of the DB instance.

- Type: String
- Pattern: .*
- Required: No

**DbiResourceId**

The AWS Region-unique, immutable identifier for the DB instance. This identifier is found in CloudTrail log entries whenever the AWS KMS key for the DB instance is accessed.

- Type: String
Pattern: .\S.*
Required: No

**DBName**

The meaning of this parameter differs according to the database engine you use.

**MySQL, MariaDB, SQL Server, PostgreSQL**

Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB instance was created. This same name is returned for the life of the DB instance.

**Oracle**

Contains the Oracle System ID (SID) of the created DB instance. Not shown when the returned parameters do not apply to an Oracle DB instance.

Type: String
Pattern: .\S.*
Required: No

**DbParameterGroups**

A list of the DB parameter groups to assign to the DB instance.

Type: Array of *AwsRdsDbParameterValue* objects
Required: No

**DbSecurityGroups**

A list of the DB security groups to assign to the DB instance.

Type: Array of strings
Pattern: .\S.*
Required: No

**DbSubnetGroup**

Information about the subnet group that is associated with the DB instance.

Type: *AwsRdsDbParameterValue* object
Required: No

**DeletionProtection**

Indicates whether the DB instance has deletion protection enabled.

When deletion protection is enabled, the database cannot be deleted.

Type: Boolean
Required: No

**DomainMemberships**

The Active Directory domain membership records associated with the DB instance.

Type: Array of *AwsRdsDbDomainMembership* objects
Required: No

**EnabledCloudWatchLogsExports**

A list of log types that this DB instance is configured to export to CloudWatch Logs.

Type: Array of strings

Pattern: `.*\S.*`

Required: No

**Endpoint**

Specifies the connection endpoint.

Type: [AwsRdsDbInstanceEndpoint](p. 1128) object

Required: No

**Engine**

Provides the name of the database engine to use for this DB instance.

Type: String

Pattern: `.*\S.*`

Required: No

**EngineVersion**

Indicates the database engine version.

Type: String

Pattern: `.*\S.*`

Required: No

**EnhancedMonitoringResourceArn**

The ARN of the CloudWatch Logs log stream that receives the enhanced monitoring metrics data for the DB instance.

Type: String

Pattern: `.*\S.*`

Required: No

**IAMDatabaseAuthenticationEnabled**

True if mapping of IAM accounts to database accounts is enabled, and otherwise false.

IAM database authentication can be enabled for the following database engines.

- For MySQL 5.6, minor version 5.6.34 or higher
- For MySQL 5.7, minor version 5.7.16 or higher
- Aurora 5.6 or higher

Type: Boolean

Required: No

**InstanceCreateTime**

Indicates when the DB instance was created.
Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: \.*\S.*
Required: No

**Iops**

Specifies the provisioned IOPS (I/O operations per second) for this DB instance.

Type: Integer
Required: No

**KmsKeyId**

If StorageEncrypted is true, the AWS KMS key identifier for the encrypted DB instance.

Type: String
Pattern: \.*\S.*
Required: No

**LatestRestorableTime**

Specifies the latest time to which a database can be restored with point-in-time restore.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: \.*\S.*
Required: No

**LicenseModel**

License model information for this DB instance.

Type: String
Pattern: \.*\S.*
Required: No

**ListenerEndpoint**

Specifies the connection endpoint.

Type: `AwsRdsDbInstanceEndpoint (p. 1128)` object

Required: No

**MasterUsername**

The master user name of the DB instance.

Type: String
MaxAllocatedStorage

The upper limit to which Amazon RDS can automatically scale the storage of the DB instance.

Type: Integer

Required: No

MonitoringInterval

The interval, in seconds, between points when enhanced monitoring metrics are collected for the DB instance.

Type: Integer

Required: No

MonitoringRoleArn

The ARN for the IAM role that permits Amazon RDS to send enhanced monitoring metrics to CloudWatch Logs.

Type: String

Pattern: .\S.*

Required: No

MultiAz

Whether the DB instance is a multiple Availability Zone deployment.

Type: Boolean

Required: No

OptionGroupMemberships

The list of option group memberships for this DB instance.

Type: Array of AmazonRdsDbOptionGroupMembership objects

Required: No

PendingModifiedValues

Changes to the DB instance that are currently pending.

Type: AmazonRdsDbPendingModifiedValues object

Required: No

PerformanceInsightsEnabled

Indicates whether Performance Insights is enabled for the DB instance.

Type: Boolean

Required: No

PerformanceInsightsKeyId

The identifier of the AWS KMS key used to encrypt the Performance Insights data.
PerformanceInsightsRetentionPeriod
The number of days to retain Performance Insights data.
Type: Integer
Required: No

PreferredBackupWindow
The range of time each day when automated backups are created, if automated backups are enabled.
Uses the format HH:MM-HH:MM. For example, 04:52-05:22.
Type: String
Pattern: .*\S.*
Required: No

PreferredMaintenanceWindow
The weekly time range during which system maintenance can occur, in Universal Coordinated Time (UTC).
Uses the format <day>:HH:MM-<day>:HH:MM.
For the day values, use mon|tue|wed|thu|fri|sat|sun.
For example, sun:09:32-sun:10:02.
Type: String
Pattern: .*\S.*
Required: No

ProcessorFeatures
The number of CPU cores and the number of threads per core for the DB instance class of the DB instance.
Type: Array of AwsRdsDbProcessorFeature (p. 1135) objects
Required: No

PromotionTier
The order in which to promote an Aurora replica to the primary instance after a failure of the existing primary instance.
Type: Integer
Required: No

PubliclyAccessible
Specifies the accessibility options for the DB instance.
A value of true specifies an Internet-facing instance with a publicly resolvable DNS name, which resolves to a public IP address.

A value of false specifies an internal instance with a DNS name that resolves to a private IP address.

**Type:** Boolean  
**Required:** No

**ReadReplicaDBClusterIdentifiers**

List of identifiers of Aurora DB clusters to which the RDS DB instance is replicated as a read replica.

**Type:** Array of strings  
**Pattern:** .*

**Required:** No

**ReadReplicaDBInstanceIdentifiers**

List of identifiers of the read replicas associated with this DB instance.

**Type:** Array of strings  
**Pattern:** .*

**Required:** No

**ReadReplicaSourceDBInstanceIdentifier**

If this DB instance is a read replica, contains the identifier of the source DB instance.

**Type:** String  
**Pattern:** .*

**Required:** No

**SecondaryAvailabilityZone**

For a DB instance with multi-Availability Zone support, the name of the secondary Availability Zone.

**Type:** String  
**Pattern:** .*

**Required:** No

**StatusInfos**

The status of a read replica. If the instance isn't a read replica, this is empty.

**Type:** Array of [AwsRdsDbStatusInfo](#) objects  
**Required:** No

**StorageEncrypted**

Specifies whether the DB instance is encrypted.

**Type:** Boolean  
**Required:** No

**StorageType**

The storage type for the DB instance.
**Type**: String

**Pattern**: . *\S . *

**Required**: No

**TdeCredentialArn**

The ARN from the key store with which the instance is associated for TDE encryption.

**Type**: String

**Pattern**: . *\S . *

**Required**: No

**Timezone**

The time zone of the DB instance.

**Type**: String

**Pattern**: . *\S . *

**Required**: No

**VpcSecurityGroups**

A list of VPC security groups that the DB instance belongs to.

**Type**: Array of [AwsRdsDbInstanceVpcSecurityGroup](p. 1129) objects

**Required**: No

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**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](aws-sdk-cpp)
- [AWS SDK for Go](aws-sdk-go)
- [AWS SDK for Java V2](aws-sdk-java-v2)
- [AWS SDK for Ruby V3](aws-sdk-ruby-v3)
**AwsRdsDbInstanceEndpoint**

Specifies the connection endpoint.

**Contents**

**Address**

Specifies the DNS address of the DB instance.

Type: String

Pattern: .*\S.*

Required: No

**HostedZoneId**

Specifies the ID that Amazon Route 53 assigns when you create a hosted zone.

Type: String

Pattern: .*\S.*

Required: No

**Port**

Specifies the port that the database engine is listening on.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbInstanceVpcSecurityGroup**

A VPC security groups that the DB instance belongs to.

**Contents**

**Status**

The status of the VPC security group.

Type: String

Pattern: .*

Required: No

**VpcSecurityGroupId**

The name of the VPC security group.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbOptionGroupMembership**

An option group membership.

**Contents**

**OptionGroupName**

The name of the option group.

Type: String

Pattern: .\S\.

Required: No

**Status**

The status of the option group membership.

Type: String

Pattern: .\S\.

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbParameterGroup**

Provides information about a parameter group for a DB instance.

**Contents**

**DbParameterGroupName**

The name of the parameter group.

Type: String

Pattern: .*\S.*

Required: No

**ParameterApplyStatus**

The status of parameter updates.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbPendingModifiedValues**

Changes to a DB instance that are currently pending.

**Contents**

**AllocatedStorage**

The new value of the allocated storage for the DB instance.

Type: Integer

Required: No

**BackupRetentionPeriod**

The new backup retention period for the DB instance.

Type: Integer

Required: No

**CaCertificateIdentifier**

The new CA certificate identifier for the DB instance.

Type: String

Pattern: .*

Required: No

**DbInstanceClass**

The new DB instance class for the DB instance.

Type: String

Pattern: .*

Required: No

**DbInstanceIdentifier**

The new DB instance identifier for the DB instance.

Type: String

Pattern: .*

Required: No

**DbSubnetGroupName**

The name of the new subnet group for the DB instance.

Type: String

Pattern: .*

Required: No

**EngineVersion**

The new engine version for the DB instance.
Type: String
Pattern: .*\S.*
Required: No

**Iops**

The new provisioned IOPS value for the DB instance.

Type: Integer
Required: No

**LicenseModel**

The new license model value for the DB instance.

Type: String
Pattern: .*\S.*
Required: No

**MasterUserPassword**

The new master user password for the DB instance.

Type: String
Pattern: .*\S.*
Required: No

**MultiAZ**

Indicates that a single Availability Zone DB instance is changing to a multiple Availability Zone deployment.

Type: Boolean
Required: No

**PendingCloudWatchLogsExports**

A list of log types that are being enabled or disabled.

Type: [AwsRdsPendingCloudWatchLogsExports](p. 1152) object
Required: No

**Port**

The new port for the DB instance.

Type: Integer
Required: No

**ProcessorFeatures**

Processor features that are being updated.

Type: Array of [AwsRdsDbProcessorFeature](p. 1135) objects
Required: No
StorageType

The new storage type for the DB instance.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbProcessorFeature**

A processor feature.

## Contents

### Name

The name of the processor feature. Valid values are `coreCount` or `threadsPerCore`.

**Type:** String

**Pattern:** `.*\S.*`

**Required:** No

### Value

The value of the processor feature.

**Type:** String

**Pattern:** `.*\S.*`

**Required:** No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsRdsDbSecurityGroupDetails**

Provides information about an Amazon RDS DB security group.

**Contents**

**DbSecurityGroupArn**

The ARN for the DB security group.

Type: String

Pattern: . *

Required: No

**DbSecurityGroupDescription**

Provides the description of the DB security group.

Type: String

Pattern: . *

Required: No

**DbSecurityGroupName**

Specifies the name of the DB security group.

Type: String

Pattern: . *

Required: No

**Ec2SecurityGroups**

Contains a list of EC2 security groups.

Type: Array of `AwsRdsDbSecurityGroupEc2SecurityGroup` objects

Required: No

**IpRanges**

Contains a list of IP ranges.

Type: Array of `AwsRdsDbSecurityGroupIpRange` objects

Required: No

**OwnerId**

Provides the AWS ID of the owner of a specific DB security group.

Type: String

Pattern: . *

Required: No

**VpcId**

Provides VPC ID associated with the DB security group.
Type: String

Pattern: . * \S . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbSecurityGroupEc2SecurityGroup**

EC2 security group information for an RDS DB security group.

**Contents**

**Ec2SecurityGroupId**

Specifies the ID for the EC2 security group.

Type: String

Pattern: .*\S\.*

Required: No

**Ec2SecurityGroupName**

Specifies the name of the EC2 security group.

Type: String

Pattern: .*\S\.*

Required: No

**Ec2SecurityGroupOwnerId**

Provides the AWS ID of the owner of the EC2 security group.

Type: String

Pattern: .*\S\.*

Required: No

**Status**

Provides the status of the EC2 security group.

Type: String

Pattern: .*\S\.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbSecurityGroupIpRange**

IP range information for an RDS DB security group.

**Contents**

**CidrIp**

Specifies the IP range.

Type: String

Pattern: .*\S.*

Required: No

**Status**

Specifies the status of the IP range.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbSnapshotDetails**

Provides details about an Amazon RDS DB cluster snapshot.

**Contents**

**AllocatedStorage**

The amount of storage (in gigabytes) to be initially allocated for the database instance.

- Type: Integer
- Required: No

**AvailabilityZone**

Specifies the name of the Availability Zone in which the DB instance was located at the time of the DB snapshot.

- Type: String
- Pattern: .*\S.*
- Required: No

**DbInstanceIdentifier**

A name for the DB instance.

- Type: String
- Pattern: .*\S.*
- Required: No

**DbiResourceId**

The identifier for the source DB instance.

- Type: String
- Pattern: .*\S.*
- Required: No

**DbSnapshotIdentifier**

The name or ARN of the DB snapshot that is used to restore the DB instance.

- Type: String
- Pattern: .*\S.*
- Required: No

**Encrypted**

Whether the DB snapshot is encrypted.

- Type: Boolean
- Required: No

**Engine**

The name of the database engine to use for this DB instance. Valid values are as follows:
• aurora
• aurora-mysql
• aurora-postgresql
• c
• mariadb
• mysql
• oracle-ee
• oracle-se
• oracle-se1
• oracle-se2
• sqlserver-ee
• sqlserver-ex
• sqlserver-se
• sqlserver-web

Type: String
Pattern: .*\S.*
Required: No

EngineVersion

The version of the database engine.

Type: String
Pattern: .*\S.*
Required: No

IamDatabaseAuthenticationEnabled

Whether mapping of IAM accounts to database accounts is enabled.

Type: Boolean
Required: No

InstanceCreateTime

Specifies the time in Coordinated Universal Time (UTC) when the DB instance, from which the snapshot was taken, was created.

Type: String
Pattern: .*\S.*
Required: No

llops

The provisioned IOPS (I/O operations per second) value of the DB instance at the time of the snapshot.

Type: Integer
Required: No
**KmsKeyId**

If `Encrypted` is `true`, the AWS KMS key identifier for the encrypted DB snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

**LicenseModel**

License model information for the restored DB instance.

Type: String

Pattern: `.*\S.*`

Required: No

**MasterUsername**

The master user name for the DB snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

**OptionGroupName**

The option group name for the DB snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

**PercentProgress**

The percentage of the estimated data that has been transferred.

Type: Integer

Required: No

**Port**

The port that the database engine was listening on at the time of the snapshot.

Type: Integer

Required: No

**ProcessorFeatures**

The number of CPU cores and the number of threads per core for the DB instance class of the DB instance.

Type: Array of `AwsRdsDbProcessorFeature` (p. 1135) objects

Required: No

**SnapshotCreateTime**

When the snapshot was taken in Coordinated Universal Time (UTC).
Type: String
Pattern: .*\S.*
Required: No

**SnapshotType**

The type of the DB snapshot.
Type: String
Pattern: .*\S.*
Required: No

**SourceDbSnapshotIdentifier**

The DB snapshot ARN that the DB snapshot was copied from.
Type: String
Pattern: .*\S.*
Required: No

**SourceRegion**

The AWS Region that the DB snapshot was created in or copied from.
Type: String
Pattern: .*\S.*
Required: No

**Status**

The status of this DB snapshot.
Type: String
Pattern: .*\S.*
Required: No

**StorageType**

The storage type associated with the DB snapshot. Valid values are as follows:
- gp2
- io1
- standard
Type: String
Pattern: .*\S.*
Required: No

**TdeCredentialArn**

The ARN from the key store with which to associate the instance for TDE encryption.
Type: String
Pattern: .*\S.*
Required: No

Timezone
The time zone of the DB snapshot.
Type: String
Pattern: .*\S.*
Required: No

VpcId
The VPC ID associated with the DB snapshot.
Type: String
Pattern: .*\S.*
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbStatusInfo**

Information about the status of a read replica.

**Contents**

**Message**

If the read replica is currently in an error state, provides the error details.

Type: String

Pattern: .*\S.*

Required: No

**Normal**

Whether the read replica instance is operating normally.

Type: Boolean

Required: No

**Status**

The status of the read replica instance.

Type: String

Pattern: .*\S.*

Required: No

**StatusType**

The type of status. For a read replica, the status type is read replication.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
### AwsRdsDbSubnetGroup

Information about the subnet group for the database instance.

**Contents**

**DbSubnetGroupArn**

The ARN of the subnet group.

Type: String

Pattern: .*\S.*

Required: No

**DbSubnetGroupDescription**

The description of the subnet group.

Type: String

Pattern: .*\S.*

Required: No

**DbSubnetGroupName**

The name of the subnet group.

Type: String

Pattern: .*\S.*

Required: No

**SubnetGroupStatus**

The status of the subnet group.

Type: String

Pattern: .*\S.*

Required: No

**Subnets**

A list of subnets in the subnet group.

Type: Array of [AwsRdsDbSubnetGroupSubnet](#) objects

Required: No

**VpcId**

The VPC ID of the subnet group.

Type: String

Pattern: .*\S.*

Required: No
See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsDbSubnetGroupSubnet**

Information about a subnet in a subnet group.

**Contents**

**SubnetAvailabilityZone**

Information about the Availability Zone for a subnet in the subnet group.

Type: `AwsRdsDbSubnetGroupSubnetAvailabilityZone` object

Required: No

**SubnetIdentifier**

The identifier of a subnet in the subnet group.

Type: String

Pattern: \.*\S.*

Required: No

**SubnetStatus**

The status of a subnet in the subnet group.

Type: String

Pattern: \.*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRdsDbSubnetGroupSubnetAvailabilityZone**

An Availability Zone for a subnet in a subnet group.

**Contents**

**Name**

The name of the Availability Zone for a subnet in the subnet group.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
### AwsRdsEventSubscriptionDetails

Details about an Amazon RDS event notification subscription. The subscription allows Amazon RDS to post events to an SNS topic.

#### Contents

**CustomerAwsId**

The identifier of the event notification subscription.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**CustSubscriptionId**

The identifier of the account that is associated with the event notification subscription.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Enabled**

Whether the event notification subscription is enabled.

- **Type:** Boolean
- **Required:** No

**EventCategoriesList**

The list of event categories for the event notification subscription.

- **Type:** Array of strings
- **Pattern:** .*\S.*
- **Required:** No

**EventSubscriptionArn**

The ARN of the event notification subscription.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**SnsTopicArn**

The ARN of the SNS topic to post the event notifications to.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No
SourceIdsList

A list of source identifiers for the event notification subscription.
Type: Array of strings
Pattern: .*=\S.*
Required: No

SourceType

The source type for the event notification subscription.
Type: String
Pattern: .*=\S.*
Required: No

Status

The status of the event notification subscription.
Valid values: creating|modifying|deleting|active|no-permission|topic-not-exist
Type: String
Pattern: .*=\S.*
Required: No

SubscriptionCreationTime

The datetime when the event notification subscription was created.
Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format.
The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.
Type: String
Pattern: .*=\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRdsPendingCloudWatchLogsExports**

Identifies the log types to enable and disable.

**Contents**

**LogTypesToDisable**

A list of log types that are being disabled.

Type: Array of strings

Pattern: `.\S.*`

Required: No

**LogTypesToEnable**

A list of log types that are being enabled.

Type: Array of strings

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Redshift objects**

**Amazon Redshift objects**

- [AwsRedshiftClusterClusterNode](p. 1154)
- [AwsRedshiftClusterClusterParameterGroup](p. 1155)
- [AwsRedshiftClusterClusterParameterStatus](p. 1156)
- [AwsRedshiftClusterClusterSecurityGroup](p. 1157)
- [AwsRedshiftClusterClusterSnapshotCopyStatus](p. 1158)
- [AwsRedshiftClusterDeferredMaintenanceWindow](p. 1159)
- [AwsRedshiftClusterDetails](p. 1160)
- [AwsRedshiftClusterElasticIpStatus](p. 1167)
- [AwsRedshiftClusterEndpoint](p. 1168)
- [AwsRedshiftClusterHsmStatus](p. 1169)
- [AwsRedshiftClusterIamRole](p. 1170)
- [AwsRedshiftClusterLoggingStatus](p. 1171)
- [AwsRedshiftClusterPendingModifiedValues](p. 1173)
- [AwsRedshiftClusterResizeInfo](p. 1175)
- **AwsRedshiftClusterRestoreStatus** *(p. 1176)*
- **AwsRedshiftClusterVpcSecurityGroup** *(p. 1178)*
AwsRedshiftClusterClusterNode

A node in an Amazon Redshift cluster.

Contents

NodeRole

The role of the node. A node might be a leader node or a compute node.

Type: String
Pattern: .\s.*
Required: No

PrivateIpAddress

The private IP address of the node.

Type: String
Pattern: .\s.*
Required: No

PublicIpAddress

The public IP address of the node.

Type: String
Pattern: .\s.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRedshiftClusterClusterParameterGroup**

A cluster parameter group that is associated with an Amazon Redshift cluster.

**Contents**

**ClusterParameterStatusList**

The list of parameter statuses.

Type: Array of [AwsRedshiftClusterClusterParameterStatus](p. 1156) objects

Required: No

**ParameterApplyStatus**

The status of updates to the parameters.

Type: String

Pattern: .*

Required: No

**ParameterGroupName**

The name of the parameter group.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](AWS SDK for C++)
- [AWS SDK for Go](AWS SDK for Go)
- [AWS SDK for Java V2](AWS SDK for Java V2)
- [AWS SDK for Ruby V3](AWS SDK for Ruby V3)
**AwsRedshiftClusterClusterParameterStatus**

The status of a parameter in a cluster parameter group for an Amazon Redshift cluster.

**Contents**

**ParameterApplyErrorDescription**

The error that prevented the parameter from being applied to the database.

- Type: String
- Pattern: .\S.*
- Required: No

**ParameterApplyStatus**

The status of the parameter. Indicates whether the parameter is in sync with the database, waiting for a cluster reboot, or encountered an error when it was applied.

- Valid values: in-sync | pending-reboot | applying | invalid-parameter | apply-deferred | apply-error | unknown-error
- Type: String
- Pattern: .\S.*
- Required: No

**ParameterName**

The name of the parameter.

- Type: String
- Pattern: .\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterClusterSecurityGroup**

A security group that is associated with the cluster.

**Contents**

**ClusterSecurityGroupName**

The name of the cluster security group.

Type: String

Pattern: .*\S.*

Required: No

**Status**

The status of the cluster security group.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-golang/v1/)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java-v2/latest/APIReference/)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/sdk-for-ruby/v3/)

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You can configure Amazon Redshift to copy snapshots for a cluster to another AWS Region. This parameter provides information about a cross-Region snapshot copy.

Contents

**DestinationRegion**

The destination Region that snapshots are automatically copied to when cross-Region snapshot copy is enabled.

Type: String

Pattern: .*\S.*

Required: No

**ManualSnapshotRetentionPeriod**

The number of days that manual snapshots are retained in the destination Region after they are copied from a source Region.

If the value is -1, then the manual snapshot is retained indefinitely.

Valid values: Either -1 or an integer between 1 and 3,653

Type: Integer

Required: No

**RetentionPeriod**

The number of days to retain automated snapshots in the destination Region after they are copied from a source Region.

Type: Integer

Required: No

**SnapshotCopyGrantName**

The name of the snapshot copy grant.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRedshiftClusterDeferredMaintenanceWindow**

A time windows during which maintenance was deferred for an Amazon Redshift cluster.

**Contents**

**DeferMaintenanceEndTime**

The end of the time window for which maintenance was deferred.

Uses the `date-time` format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: `.\S.*`

Required: No

**DeferMaintenanceIdentifier**

The identifier of the maintenance window.

Type: String

Pattern: `.\S.*`

Required: No

**DeferMaintenanceStartTime**

The start of the time window for which maintenance was deferred.

Uses the `date-time` format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: `.\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/api/latest/index.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/api/latest/index.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/java/api/latest/index.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/sdk-for-ruby/api/latest/index.html)
**AwsRedshiftClusterDetails**

Details about an Amazon Redshift cluster.

**Contents**

**AllowVersionUpgrade**

Indicates whether major version upgrades are applied automatically to the cluster during the maintenance window.

Type: Boolean

Required: No

**AutomatedSnapshotRetentionPeriod**

The number of days that automatic cluster snapshots are retained.

Type: Integer

Required: No

**AvailabilityZone**

The name of the Availability Zone in which the cluster is located.

Type: String

Pattern: .*

Required: No

**ClusterAvailabilityStatus**

The availability status of the cluster for queries. Possible values are the following:

- **Available** - The cluster is available for queries.
- **Unavailable** - The cluster is not available for queries.
- **Maintenance** - The cluster is intermittently available for queries due to maintenance activities.
- **Modifying** - The cluster is intermittently available for queries due to changes that modify the cluster.
- **Failed** - The cluster failed and is not available for queries.

Type: String

Pattern: .*

Required: No

**ClusterCreateTime**

Indicates when the cluster was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: No
ClusterIdentifier

The unique identifier of the cluster.
Type: String
Pattern: .*\S.*
Required: No

ClusterNodes

The nodes in the cluster.
Type: Array of AwsRedshiftClusterClusterNode (p. 1154) objects
Required: No

ClusterParameterGroups

The list of cluster parameter groups that are associated with this cluster.
Type: Array of AwsRedshiftClusterClusterParameterGroup (p. 1155) objects
Required: No

ClusterPublicKey

The public key for the cluster.
Type: String
Pattern: .*\S.*
Required: No

ClusterRevisionNumber

The specific revision number of the database in the cluster.
Type: String
Pattern: .*\S.*
Required: No

ClusterSecurityGroups

A list of cluster security groups that are associated with the cluster.
Type: Array of AwsRedshiftClusterClusterSecurityGroup (p. 1157) objects
Required: No

ClusterSnapshotCopyStatus

Information about the destination Region and retention period for the cross-Region snapshot copy.
Type: AwsRedshiftClusterClusterSnapshotCopyStatus (p. 1158) object
Required: No

ClusterStatus

The current status of the cluster.
Valid values: available | available, prep-for-resize | available, resize-cleanup | cancelling-resize | creating | deleting | final-snapshot | hardware-
failure|incompatible-hsm| incompatible-network| incompatible-parameters
| incompatible-restore| modifying| paused| rebooting| renaming| resizing|
| rotating-keys| storage-full| updating-hsm

Type: String

Pattern: .*\S.*

Required: No

**ClusterSubnetGroupName**

The name of the subnet group that is associated with the cluster. This parameter is valid only when the cluster is in a VPC.

Type: String

Pattern: .*\S.*

Required: No

**ClusterVersion**

The version ID of the Amazon Redshift engine that runs on the cluster.

Type: String

Pattern: .*\S.*

Required: No

**DBName**

The name of the initial database that was created when the cluster was created.

The same name is returned for the life of the cluster.

If an initial database is not specified, a database named devdev is created by default.

Type: String

Pattern: .*\S.*

Required: No

**DeferredMaintenanceWindows**

List of time windows during which maintenance was deferred.

Type: Array of AwsRedshiftClusterDeferredMaintenanceWindow (p. 1159) objects

Required: No

**ElasticIpStatus**

Information about the status of the Elastic IP (EIP) address.

Type: AwsRedshiftClusterElasticIpStatus (p. 1167) object

Required: No

**ElasticResizeNumberOfNodeOptions**

The number of nodes that you can use the elastic resize method to resize the cluster to.

Type: String

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Pattern: .*\S.*
Required: No

**Encrypted**

Indicates whether the data in the cluster is encrypted at rest.

Type: Boolean
Required: No

**Endpoint**

The connection endpoint.

Type: [AwsRedshiftClusterEndpoint](p. 1168) object
Required: No

**EnhancedVpcRouting**

Indicates whether to create the cluster with enhanced VPC routing enabled.

Type: Boolean
Required: No

**ExpectedNextSnapshotScheduleTime**

Indicates when the next snapshot is expected to be taken. The cluster must have a valid snapshot schedule and have backups enabled.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

**ExpectedNextSnapshotScheduleTimeStatus**

The status of the next expected snapshot.

Valid values: OnTrack | Pending

Type: String
Pattern: .*\S.*
Required: No

**HsmStatus**

Information about whether the Amazon Redshift cluster finished applying any changes to hardware security module (HSM) settings that were specified in a modify cluster command.

Type: [AwsRedshiftClusterHsmStatus](p. 1169) object
Required: No

**IamRoles**

A list of IAM roles that the cluster can use to access other AWS services.
Type: Array of `AwsRedshiftClusterIamRole` objects

Required: No

**KmsKeyId**

The identifier of the AWS KMS encryption key that is used to encrypt data in the cluster.

Type: String

Pattern: `.\S.*`

Required: No

**LoggingStatus**

Information about the logging status of the cluster.

Type: `AwsRedshiftClusterLoggingStatus` object

Required: No

**MaintenanceTrackName**

The name of the maintenance track for the cluster.

Type: String

Pattern: `.\S.*`

Required: No

**ManualSnapshotRetentionPeriod**

The default number of days to retain a manual snapshot.

If the value is -1, the snapshot is retained indefinitely.

This setting doesn't change the retention period of existing snapshots.

Valid values: Either -1 or an integer between 1 and 3,653

Type: Integer

Required: No

**MasterUsername**

The master user name for the cluster. This name is used to connect to the database that is specified
in as the value of DBName.

Type: String

Pattern: `.\S.*`

Required: No

**NextMaintenanceWindowStartTime**

Indicates the start of the next maintenance window.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format.
The value cannot contain spaces, and date and time should be separated by T. For example,

Type: String
Pattern: .*\S.*
Required: No

**NodeType**

The node type for the nodes in the cluster.

Type: String

Pattern: .*\S.*

Required: No

**NumberOfNodes**

The number of compute nodes in the cluster.

Type: Integer

Required: No

**PendingActions**

A list of cluster operations that are waiting to start.

Type: Array of strings

Pattern: .*\S.*

Required: No

**PendingModifiedValues**

A list of changes to the cluster that are currently pending.

Type: AmazonRedshiftClusterPendingModifiedValues (p. 1173) object

Required: No

**PreferredMaintenanceWindow**

The weekly time range, in Universal Coordinated Time (UTC), during which system maintenance can occur.

Format: <day>:HH:MM-<day>:HH:MM

For the day values, use mon | tue | wed | thu | fri | sat | sun

For example, sun:09:32-sun:10:02

Type: String

Pattern: .*\S.*

Required: No

**PubliclyAccessible**

Whether the cluster can be accessed from a public network.

Type: Boolean

Required: No

**ResizeInfo**

Information about the resize operation for the cluster.
Type: `AwsRedshiftClusterResizeInfo (p. 1175)` object

Required: No

**RestoreStatus**

Information about the status of a cluster restore action. Only applies to a cluster that was created by restoring a snapshot.

Type: `AwsRedshiftClusterRestoreStatus (p. 1176)` object

Required: No

**SnapshotScheduleIdentifier**

A unique identifier for the cluster snapshot schedule.

Type: String

Pattern: ```.*\S.*```

Required: No

**SnapshotScheduleState**

The current state of the cluster snapshot schedule.

Valid values: MODIFYING | ACTIVE | FAILED

Type: String

Pattern: ```.*\S.*```

Required: No

**VpcId**

The identifier of the VPC that the cluster is in, if the cluster is in a VPC.

Type: String

Pattern: ```.*\S.*```

Required: No

**VpcSecurityGroups**

The list of VPC security groups that the cluster belongs to, if the cluster is in a VPC.

Type: Array of `AwsRedshiftClusterVpcSecurityGroup (p. 1178)` objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterElasticIpStatus**

The status of the elastic IP (EIP) address for an Amazon Redshift cluster.

**Contents**

**ElasticIp**

The elastic IP address for the cluster.

Type: String

Pattern: . *\S . *

Required: No

**Status**

The status of the elastic IP address.

Type: String

Pattern: . *\S . *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRedshiftClusterEndpoint**

The connection endpoint for an Amazon Redshift cluster.

**Contents**

**Address**

The DNS address of the cluster.

Type: String

Pattern: .\S\.

Required: No

**Port**

The port that the database engine listens on.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterHsmStatus**

Information about whether an Amazon Redshift cluster finished applying any hardware changes to security module (HSM) settings that were specified in a modify cluster command.

**Contents**

**HsmClientCertificateIdentifier**

The name of the HSM client certificate that the Amazon Redshift cluster uses to retrieve the data encryption keys that are stored in an HSM.

Type: String

Pattern: .*\S.*

Required: No

**HsmConfigurationIdentifier**

The name of the HSM configuration that contains the information that the Amazon Redshift cluster can use to retrieve and store keys in an HSM.

Type: String

Pattern: .*\S.*

Required: No

**Status**

Indicates whether the Amazon Redshift cluster has finished applying any HSM settings changes specified in a modify cluster command.

Type: String

Valid values: active | applying

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/
**AwsRedshiftClusterIamRole**

An IAM role that the cluster can use to access other AWS services.

**Contents**

**ApplyStatus**

The status of the IAM role's association with the cluster.

Valid values: in-sync | adding | removing

Type: String

Pattern: .*\S.*

Required: No

**IamRoleArn**

The ARN of the IAM role.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterLoggingStatus**

Provides information about the logging status of the cluster.

**Contents**

**BucketName**

The name of the S3 bucket where the log files are stored.

Type: String

Pattern: .*

Required: No

**LastFailureMessage**

The message indicating that the logs failed to be delivered.

Type: String

Pattern: .*

Required: No

**LastFailureTime**

The last time when logs failed to be delivered.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: No

**LastSuccessfulDeliveryTime**

The last time that logs were delivered successfully.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*

Required: No

**LoggingEnabled**

Indicates whether logging is enabled.

Type: Boolean

Required: No

**S3KeyPrefix**

Provides the prefix applied to the log file names.
Type: String

Pattern: .\*\$.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRedshiftClusterPendingModifiedValues**

Changes to the Amazon Redshift cluster that are currently pending.

**Contents**

*AutomatedSnapshotRetentionPeriod*

The pending or in-progress change to the automated snapshot retention period.

Type: Integer

Required: No

*ClusterIdentifier*

The pending or in-progress change to the identifier for the cluster.

Type: String

Pattern: .*

Required: No

*ClusterType*

The pending or in-progress change to the cluster type.

Type: String

Pattern: .*

Required: No

*ClusterVersion*

The pending or in-progress change to the service version.

Type: String

Pattern: .*

Required: No

*EncryptionType*

The encryption type for a cluster.

Type: String

Pattern: .*

Required: No

*EnhancedVpcRouting*

Indicates whether to create the cluster with enhanced VPC routing enabled.

Type: Boolean

Required: No

*MaintenanceTrackName*

The name of the maintenance track that the cluster changes to during the next maintenance window.
Type: String
Pattern: .*\S.*
Required: No

**MasterUserPassword**

The pending or in-progress change to the master user password for the cluster.

Type: String
Pattern: .*\S.*
Required: No

**NodeType**

The pending or in-progress change to the cluster's node type.

Type: String
Pattern: .*\S.*
Required: No

**NumberOfNodes**

The pending or in-progress change to the number of nodes in the cluster.

Type: Integer
Required: No

**PubliclyAccessible**

The pending or in-progress change to whether the cluster can be connected to from the public network.

Type: Boolean
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterResizeInfo**

Information about the resize operation for the cluster.

**Contents**

**AllowCancelResize**

Indicates whether the resize operation can be canceled.

Type: Boolean

Required: No

**ResizeType**

The type of resize operation.

Valid values: ClassicResize

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsRedshiftClusterRestoreStatus**

Information about the status of a cluster restore action. It only applies if the cluster was created by restoring a snapshot.

**Contents**

- **CurrentRestoreRateInMegaBytesPerSecond**
  
  The number of megabytes per second being transferred from the backup storage. Returns the average rate for a completed backup.

  This field is only updated when you restore to DC2 and DS2 node types.

  Type: Double

  Required: No

- **ElapsedTimeInSeconds**

  The amount of time an in-progress restore has been running, or the amount of time it took a completed restore to finish.

  This field is only updated when you restore to DC2 and DS2 node types.

  Type: Long

  Required: No

- **EstimatedTimeToCompletionInSeconds**

  The estimate of the time remaining before the restore is complete. Returns 0 for a completed restore.

  This field is only updated when you restore to DC2 and DS2 node types.

  Type: Long

  Required: No

- **ProgressInMegaBytes**

  The number of megabytes that were transferred from snapshot storage.

  This field is only updated when you restore to DC2 and DS2 node types.

  Type: Long

  Required: No

- **SnapshotSizeInMegaBytes**

  The size of the set of snapshot data that was used to restore the cluster.

  This field is only updated when you restore to DC2 and DS2 node types.

  Type: Long

  Required: No

- **Status**

  The status of the restore action.

  Valid values: starting | restoring | completed | failed
Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsRedshiftClusterVpcSecurityGroup**

A VPC security group that the cluster belongs to, if the cluster is in a VPC.

**Contents**

**Status**

The status of the VPC security group.

Type: String

Pattern: . *\S . *

Required: No

**VpcSecurityGroupId**

The identifier of the VPC security group.

Type: String

Pattern: . *\S . *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Simple Storage Service (S3) objects**

**Amazon Simple Storage Service (S3) objects**

- AwsS3AccountPublicAccessBlockDetails (p. 1180)
- AwsS3BucketBucketLifecycleConfigurationDetails (p. 1181)
- AwsS3BucketBucketLifecycleConfigurationRulesAbortIncompleteMultipartUploadDetails (p. 1182)
- AwsS3BucketBucketLifecycleConfigurationRulesDetails (p. 1183)
- AwsS3BucketBucketLifecycleConfigurationRulesFilterDetails (p. 1185)
- AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateDetails (p. 1186)
- AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateOperandsDetails (p. 1187)
- AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateOperandsTagDetails (p. 1188)
- AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateTagDetails (p. 1189)
- AwsS3BucketBucketLifecycleConfigurationRulesNoncurrentVersionTransitionsDetails (p. 1190)
- AwsS3BucketBucketLifecycleConfigurationRulesTransitionsDetails (p. 1191)
- AwsS3BucketBucketVersioningConfiguration (p. 1192)
- AwsS3BucketDetails (p. 1193)
- AwsS3BucketLoggingConfiguration (p. 1196)
• AWS3BucketNotificationConfiguration (p. 1197)
• AWS3BucketNotificationConfigurationDetail (p. 1198)
• AWS3BucketNotificationConfigurationFilter (p. 1199)
• AWS3BucketNotificationConfigurationS3KeyFilter (p. 1200)
• AWS3BucketNotificationConfigurationS3KeyFilterRule (p. 1201)
• AWS3BucketObjectLockConfiguration (p. 1202)
• AWS3BucketObjectLockConfigurationRuleDefaultRetentionDetails (p. 1203)
• AWS3BucketObjectLockConfigurationRuleDetails (p. 1204)
• AWS3BucketServerSideEncryptionByDefault (p. 1205)
• AWS3BucketServerSideEncryptionConfiguration (p. 1206)
• AWS3BucketServerSideEncryptionRule (p. 1207)
• AWS3BucketWebsiteConfiguration (p. 1208)
• AWS3BucketWebsiteConfigurationRedirectTo (p. 1209)
• AWS3BucketWebsiteConfigurationRoutingRule (p. 1210)
• AWS3BucketWebsiteConfigurationRoutingRuleCondition (p. 1211)
• AWS3BucketWebsiteConfigurationRoutingRuleRedirect (p. 1212)
• AWS3ObjectDetails (p. 1214)
**AwsS3AccountPublicAccessBlockDetails**

provides information about the Amazon S3 Public Access Block configuration for accounts.

**Contents**

**BlockPublicAcls**

Indicates whether to reject calls to update an S3 bucket if the calls include a public access control list (ACL).

Type: Boolean

Required: No

**BlockPublicPolicy**

Indicates whether to reject calls to update the access policy for an S3 bucket or access point if the policy allows public access.

Type: Boolean

Required: No

**IgnorePublicAcls**

Indicates whether Amazon S3 ignores public ACLs that are associated with an S3 bucket.

Type: Boolean

Required: No

**RestrictPublicBuckets**

Indicates whether to restrict access to an access point or S3 bucket that has a public policy to only AWS service principals and authorized users within the S3 bucket owner's account.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsS3BucketBucketLifecycleConfigurationDetails

The lifecycle configuration for the objects in the S3 bucket.

Contents

Rules

The lifecycle rules.

Type: Array of AwsS3BucketBucketLifecycleConfigurationRulesDetails (p. 1183) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketBucketLifecycleConfigurationRulesAbortIncompleteMultipartUploadDetails**

Information about what Amazon S3 does when a multipart upload is incomplete.

**Contents**

**DaysAfterInitiation**

The number of days after which Amazon S3 cancels an incomplete multipart upload.

Type: Integer  
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)  
- [AWS SDK for Go](#)  
- [AWS SDK for Java V2](#)  
- [AWS SDK for Ruby V3](#)
**AwsS3BucketBucketLifecycleConfigurationRulesDetails**

Configuration for a lifecycle rule.

**Contents**

**AbortIncompleteMultipartUpload**

How Amazon S3 responds when a multipart upload is incomplete. Specifically, provides a number of days before Amazon S3 cancels the entire upload.

Type: `AwsS3BucketBucketLifecycleConfigurationRulesAbortIncompleteMultipartUploadDetails (p. 1182)` object

Required: No

**ExpirationDate**

The date when objects are moved or deleted.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, `2020-03-22T13:22:13.933Z`.

Type: String

Pattern: `.*\S.*`

Required: No

**ExpirationInDays**

The length in days of the lifetime for objects that are subject to the rule.

Type: Integer

Required: No

**ExpiredObjectDeleteMarker**

Whether Amazon S3 removes a delete marker that has no noncurrent versions. If set to `true`, the delete marker is expired. If set to `false`, the policy takes no action.

If you provide `ExpiredObjectDeleteMarker`, you cannot provide `ExpirationInDays` or `ExpirationDate`.

Type: Boolean

Required: No

**Filter**

Identifies the objects that a rule applies to.

Type: `AwsS3BucketBucketLifecycleConfigurationRulesFilterDetails (p. 1185)` object

Required: No

**ID**

The unique identifier of the rule.

Type: String
**NoncurrentVersionExpirationInDays**

The number of days that an object is noncurrent before Amazon S3 can perform the associated action.

Type: Integer

Required: No

**NoncurrentVersionTransitions**

Transition rules that describe when noncurrent objects transition to a specified storage class.

Type: Array of

`AwsS3BucketBucketLifecycleConfigurationRulesNoncurrentVersionTransitionsDetails` (p. 1190) objects

Required: No

**Prefix**

A prefix that identifies one or more objects that the rule applies to.

Type: String

Pattern: .*\S.*

Required: No

**Status**

The current status of the rule. Indicates whether the rule is currently being applied.

Type: String

Pattern: .*\S.*

Required: No

**Transitions**

Transition rules that indicate when objects transition to a specified storage class.

Type: Array of `AwsS3BucketBucketLifecycleConfigurationRulesTransitionsDetails` (p. 1191) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketBucketLifecycleConfigurationRulesFilterDetails**

Identifies the objects that a rule applies to.

**Contents**

**Predicate**

The configuration for the filter.

Type: *AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateDetails (p. 1186)* object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateDetails**

The configuration for the filter.

### Contents

#### Operands

The values to use for the filter.

Type: Array of

`AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateOperandsDetails (p. 1187)` objects

Required: No

#### Prefix

A prefix filter.

Type: String

Pattern: `.*\S.*`

Required: No

#### Tag

A tag filter.

Type: `AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateTagDetails (p. 1189)` object

Required: No

#### Type

Whether to use AND or OR to join the operands. Valid values are LifecycleAndOperator or LifecycleOrOperator.

Type: String

Pattern: `.*\S.*`

Required: No

### See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateOperandsDetails**

A value to use for the filter.

**Contents**

**Prefix**

Prefix text for matching objects.

Type: String

Pattern: ".\S.*"

Required: No

**Tag**

A tag that is assigned to matching objects.

Type: *AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateOperandsTagDetails (p. 1188)* object

Required: No

**Type**

The type of filter value. Valid values are LifecyclePrefixPredicate or LifecycleTagPredicate.

Type: String

Pattern: ".\S.*"

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
A tag that is assigned to matching objects.

**Contents**

**Key**

- The tag key.
  - Type: String
  - Pattern: .\S.*
  - Required: No

**Value**

- The tag value.
  - Type: String
  - Pattern: .\S.*
  - Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketBucketLifecycleConfigurationRulesFilterPredicateTagDetails**

A tag filter.

**Contents**

**Key**

The tag key.

Type: String

Pattern: .\S.*

Required: No

**Value**

The tag value

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
A transition rule that describes when noncurrent objects transition to a specified storage class.

Contents

Days

The number of days that an object is noncurrent before Amazon S3 can perform the associated action.

Type: Integer

Required: No

StorageClass

The class of storage to change the object to after the object is noncurrent for the specified number of days.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketBucketLifecycleConfigurationRulesTransitionsDetails**

A rule for when objects transition to specific storage classes.

**Contents**

**Date**

A date on which to transition objects to the specified storage class. If you provide Date, you cannot provide Days.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*[^\s].*

Required: No

**Days**

The number of days after which to transition the object to the specified storage class. If you provide Days, you cannot provide Date.

Type: Integer

Required: No

**StorageClass**

The storage class to transition the object to. Valid values are as follows:

- DEEP_ARCHIVE
- GLACIER
- INTELLIGENT_TIERING
- ONEZONE_IA
- STANDARD_IA

Type: String

Pattern: .*[^\s].*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3


**AwsS3BucketBucketVersioningConfiguration**

Describes the versioning state of an S3 bucket.

**Contents**

**IsMfaDeleteEnabled**

Specifies whether MFA delete is currently enabled in the S3 bucket versioning configuration. If the S3 bucket was never configured with MFA delete, then this attribute is not included.

Type: Boolean

Required: No

**Status**

The versioning status of the S3 bucket. Valid values are Enabled or Suspended.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketDetails**

The details of an Amazon S3 bucket.

**Contents**

**AccessControlList**

The access control list for the S3 bucket.

Type: String

Pattern: .[^\S]*

Required: No

**BucketLifecycleConfiguration**

The lifecycle configuration for objects in the S3 bucket.

Type: [AwsS3BucketBucketLifecycleConfigurationDetails](p. 1181) object

Required: No

**BucketLoggingConfiguration**

The logging configuration for the S3 bucket.

Type: [AwsS3BucketLoggingConfiguration](p. 1196) object

Required: No

**BucketNotificationConfiguration**

The notification configuration for the S3 bucket.

Type: [AwsS3BucketNotificationConfiguration](p. 1197) object

Required: No

**BucketVersioningConfiguration**

The versioning state of an S3 bucket.

Type: [AwsS3BucketBucketVersioningConfiguration](p. 1192) object

Required: No

**BucketWebsiteConfiguration**

The website configuration parameters for the S3 bucket.

Type: [AwsS3BucketWebsiteConfiguration](p. 1208) object

Required: No

**CreatedAt**

Indicates when the S3 bucket was created.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String
Pattern: .*\S.*
Required: No

ObjectLockConfiguration

Specifies which rule Amazon S3 applies by default to every new object placed in the specified bucket.

Type: AwsS3BucketObjectLockConfiguration (p. 1202) object
Required: No

OwnerAccountId

The AWS account identifier of the account that owns the S3 bucket.

Type: String
Pattern: .*\S.*
Required: No

OwnerId

The canonical user ID of the owner of the S3 bucket.

Type: String
Pattern: .*\S.*
Required: No

OwnerName

The display name of the owner of the S3 bucket.

Type: String
Pattern: .*\S.*
Required: No

PublicAccessBlockConfiguration

Provides information about the Amazon S3 Public Access Block configuration for the S3 bucket.

Type: AwsS3AccountPublicAccessBlockDetails (p. 1180) object
Required: No

ServerSideEncryptionConfiguration

The encryption rules that are applied to the S3 bucket.

Type: AwsS3BucketServerSideEncryptionConfiguration (p. 1206) object
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsS3BucketLoggingConfiguration**

Information about logging for the S3 bucket

**Contents**

**DestinationBucketName**

The name of the S3 bucket where log files for the S3 bucket are stored.

Type: String

Pattern: .*\S.*

Required: No

**LogFilePrefix**

The prefix added to log files for the S3 bucket.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketNotificationConfiguration**

The notification configuration for the S3 bucket.

**Contents**

**Configurations**

Configurations for S3 bucket notifications.

Type: Array of [AwsS3BucketNotificationConfigurationDetail](p. 1198) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsS3BucketNotificationConfigurationDetail

Details for an S3 bucket notification configuration.

Contents

Destination

The ARN of the Lambda function, Amazon SQS queue, or Amazon SNS topic that generates the notification.

Type: String

Pattern: .\S\S.*

Required: No

Events

The list of events that trigger a notification.

Type: Array of strings

Pattern: .\S\S.*

Required: No

Filter

The filters that determine which S3 buckets generate notifications.

Type: AwsS3BucketNotificationConfigurationFilter (p. 1199) object

Required: No

Type

Indicates the type of notification. Notifications can be generated using Lambda functions, Amazon SQS queues, or Amazon SNS topics, with corresponding valid values as follows:

• LambdaConfiguration
• QueueConfiguration
• TopicConfiguration

Type: String

Pattern: .\S\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsS3BucketNotificationConfigurationFilter**

Filtering information for the notifications. The filtering is based on Amazon S3 key names.

**Contents**

**S3KeyFilter**

Details for an Amazon S3 filter.

Type: [AwsS3BucketNotificationConfigurationS3KeyFilter](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsS3BucketNotificationConfigurationS3KeyFilter
Details for an Amazon S3 filter.

Contents

FilterRules
The filter rules for the filter.

Type: Array of AwsS3BucketNotificationConfigurationS3KeyFilterRule (p. 1201) objects

Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketNotificationConfigurationS3KeyFilterRule**

Details for a filter rule.

**Contents**

**Name**

Indicates whether the filter is based on the prefix or suffix of the Amazon S3 key.

- **Type:** String
- **Valid Values:** Prefix | Suffix
- **Required:** No

**Value**

The filter value.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-go/)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsS3BucketObjectLockConfiguration**

The container element for S3 Object Lock configuration parameters. In Amazon S3, Object Lock can help prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely.

**Contents**

**ObjectLockEnabled**

Indicates whether the bucket has an Object Lock configuration enabled.

Type: String

Pattern: \.*\S.*

Required: No

**Rule**

Specifies the Object Lock rule for the specified object.

Type: `AwsS3BucketObjectLockConfigurationRuleDetails (p. 1204)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketObjectLockConfigurationRuleDefaultRetentionDetails**

The default S3 Object Lock retention mode and period that you want to apply to new objects placed in the specified Amazon S3 bucket.

**Contents**

**Days**

The number of days that you want to specify for the default retention period.

- Type: Integer
- Required: No

**Mode**

The default Object Lock retention mode you want to apply to new objects placed in the specified bucket.

- Type: String
- Pattern: .*\S.*
- Required: No

**Years**

The number of years that you want to specify for the default retention period.

- Type: Integer
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-c-plus-plus/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

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**AwsS3BucketObjectLockConfigurationRuleDetails**

Specifies the S3 Object Lock rule for the specified object. In Amazon S3, Object Lock can help prevent objects from being deleted or overwritten for a fixed amount of time or indefinitely.

**Contents**

**DefaultRetention**

The default Object Lock retention mode and period that you want to apply to new objects placed in the specified bucket.

Type: `AwsS3BucketObjectLockConfigurationRuleDefaultRetentionDetails` (p. 1203) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketServerSideEncryptionByDefault**

Specifies the default server-side encryption to apply to new objects in the bucket.

**Contents**

**KMSMasterKeyID**

AWS KMS key ID to use for the default encryption.

Type: String

Pattern: .[^\S]\

Required: No

**SSEAlgorithm**

Server-side encryption algorithm to use for the default encryption. Valid values are aws: kms or AES256.

Type: String

Pattern: .[^\S]\

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketServerSideEncryptionConfiguration**

The encryption configuration for the S3 bucket.

**Contents**

**Rules**

The encryption rules that are applied to the S3 bucket.

Type: Array of [AwsS3BucketServerSideEncryptionRule](#) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++]
- [AWS SDK for Go]
- [AWS SDK for Java V2]
- [AWS SDK for Ruby V3]
**AwsS3BucketServerSideEncryptionRule**

An encryption rule to apply to the S3 bucket.

**Contents**

**ApplyServerSideEncryptionByDefault**

Specifies the default server-side encryption to apply to new objects in the bucket. If a PUT object request doesn't specify any server-side encryption, this default encryption is applied.

Type: `AwsS3BucketServerSideEncryptionByDefault (p. 1205)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketWebsiteConfiguration**

Website parameters for the S3 bucket.

**Contents**

**ErrorDocument**

The name of the error document for the website.

Type: String

Pattern: *.\S.*

Required: No

**IndexDocumentSuffix**

The name of the index document for the website.

Type: String

Pattern: *.\S.*

Required: No

**RedirectAllRequestsTo**

The redirect behavior for requests to the website.

Type: **AwsS3BucketWebsiteConfigurationRedirectTo** (p. 1209) object

Required: No

**RoutingRules**

The rules for applying redirects for requests to the website.

Type: Array of **AwsS3BucketWebsiteConfigurationRoutingRule** (p. 1210) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketWebsiteConfigurationRedirectTo**

The redirect behavior for requests to the website.

**Contents**

**Hostname**

The name of the host to redirect requests to.

Type: String

Pattern: .*\S.*

Required: No

**Protocol**

The protocol to use when redirecting requests. By default, this field uses the same protocol as the original request. Valid values are http or https.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsS3BucketWebsiteConfigurationRoutingRule**

A rule for redirecting requests to the website.

**Contents**

**Condition**

Provides the condition that must be met in order to apply the routing rule.

Type: `AwsS3BucketWebsiteConfigurationRoutingRuleCondition (p. 1211)` object

Required: No

**Redirect**

Provides the rules to redirect the request if the condition in `Condition` is met.

Type: `AwsS3BucketWebsiteConfigurationRoutingRuleRedirect (p. 1212)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketWebsiteConfigurationRoutingRuleCondition**

The condition that must be met in order to apply the routing rule.

**Contents**

**HttpErrorCodeReturnedEquals**

Indicates to redirect the request if the HTTP error code matches this value.

- **Type**: String
- **Pattern**: .^\S.*
- **Required**: No

**KeyPrefixEquals**

Indicates to redirect the request if the key prefix matches this value.

- **Type**: String
- **Pattern**: .^\S.*
- **Required**: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsS3BucketWebsiteConfigurationRoutingRuleRedirect**

The rules to redirect the request if the condition in `Condition` is met.

**Contents**

**Hostname**

The host name to use in the redirect request.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**HttpRedirectCode**

The HTTP redirect code to use in the response.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Protocol**

The protocol to use to redirect the request. By default, uses the protocol from the original request.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**ReplaceKeyPrefixWith**

The object key prefix to use in the redirect request.

Cannot be provided if `ReplaceKeyWith` is present.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**ReplaceKeyWith**

The specific object key to use in the redirect request.

Cannot be provided if `ReplaceKeyPrefixWith` is present.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

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AwsS3ObjectDetails

Details about an Amazon S3 object.

Contents

ContentType

A standard MIME type describing the format of the object data.

Type: String

Pattern: .*\S.*

Required: No

ETag

The opaque identifier assigned by a web server to a specific version of a resource found at a URL.

Type: String

Pattern: .*\S.*

Required: No

LastModified

Indicates when the object was last modified.

Uses the date-time format specified in RFC 3339 section 5.6, Internet Date/Time Format. The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

Type: String

Pattern: .*\S.*

Required: No

ServerSideEncryption

If the object is stored using server-side encryption, the value of the server-side encryption algorithm used when storing this object in Amazon S3.

Type: String

Pattern: .*\S.*

Required: No

SSEKMSKeyId

The identifier of the AWS KMS symmetric customer managed key that was used for the object.

Type: String

Pattern: .*\S.*

Required: No

VersionId

The version of the object.
Type: String
Pattern: . *\$ . *
Required: No

See Also
For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Amazon SageMaker

Amazon SageMaker objects

- AwsSageMakerNotebookInstanceDetails (p. 1216)
- AwsSageMakerNotebookInstanceMetadataServiceConfigurationDetails (p. 1220)
AwsSageMakerNotebookInstanceDetails

Provides details about an Amazon SageMaker notebook instance.

Contents

AcceleratorTypes

A list of Amazon Elastic Inference instance types to associate with the notebook instance. Currently, only one instance type can be associated with a notebook instance.

Type: Array of strings

Pattern: .\S.*

Required: No

AdditionalCodeRepositories

An array of up to three Git repositories associated with the notebook instance. These can be either the names of Git repositories stored as resources in your account, or the URL of Git repositories in AWS CodeCommit or in any other Git repository. These repositories are cloned at the same level as the default repository of your notebook instance. For more information, see Associating Git repositories with SageMaker notebook instances in the Amazon SageMaker Developer Guide.

Type: Array of strings

Pattern: .\S.*

Required: No

DefaultCodeRepository

The Git repository associated with the notebook instance as its default code repository. This can be either the name of a Git repository stored as a resource in your account, or the URL of a Git repository in AWS CodeCommit or in any other Git repository. When you open a notebook instance, it opens in the directory that contains this repository. For more information, see Associating Git repositories with SageMaker notebook instances in the Amazon SageMaker Developer Guide.

Type: String

Pattern: .\S.*

Required: No

DirectInternetAccess

Sets whether SageMaker provides internet access to the notebook instance. If you set this to Disabled, this notebook instance is able to access resources only in your VPC, and is not be able to connect to SageMaker training and endpoint services unless you configure a Network Address Translation (NAT) Gateway in your VPC.

Type: String

Pattern: .\S.*

Required: No

FailureReason

If status of the instance is Failed, the reason it failed.

Type: String
Pattern: .\S.*
Required: No

**InstanceMetadataServiceConfiguration**

Information on the IMDS configuration of the notebook instance.

Type: [AwsSageMakerNotebookInstanceMetadataServiceConfigurationDetails](p. 1220) object
Required: No

**InstanceType**

The type of machine learning (ML) compute instance to launch for the notebook instance.

Type: String
Pattern: .\S.*
Required: No

**KmsKeyId**

The Amazon Resource Name (ARN) of an AWS Key Management Service (AWS KMS) key that SageMaker uses to encrypt data on the storage volume attached to your notebook instance. The KMS key you provide must be enabled. For information, see [Enabling and disabling keys](#) in the [AWS Key Management Service Developer Guide](#).

Type: String
Pattern: .\S.*
Required: No

**NetworkInterfaceId**

The network interface ID that SageMaker created when the instance was created.

Type: String
Pattern: .\S.*
Required: No

**NotebookInstanceArn**

The Amazon Resource Name (ARN) of the notebook instance.

Type: String
Pattern: .\S.*
Required: No

**NotebookInstanceLifecycleConfigName**

The name of a notebook instance lifecycle configuration.

Type: String
Pattern: .\S.*
Required: No

**NotebookInstanceName**

The name of the new notebook instance.
NotebookInstanceStatus

The status of the notebook instance.

Type: String
Pattern: .\s.*
Required: No

PlatformIdentifier

The platform identifier of the notebook instance runtime environment.

Type: String
Pattern: .\s.*
Required: No

RoleArn

The Amazon Resource Name (ARN) of the IAM role associated with the instance.

Type: String
Pattern: .\s.*
Required: No

RootAccess

Whether root access is enabled or disabled for users of the notebook instance.

Type: String
Pattern: .\s.*
Required: No

SecurityGroups

The VPC security group IDs.

Type: Array of strings
Pattern: .\s.*
Required: No

SubnetId

The ID of the VPC subnet to which you have a connectivity from your ML compute instance.

Type: String
Pattern: .\s.*
Required: No
Url

The URL that you use to connect to the Jupyter notebook that is running in your notebook instance.

Type: String

Pattern: .*\S.*

Required: No

VolumeSizeInGB

The size, in GB, of the ML storage volume to attach to the notebook instance.

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsSageMakerNotebookInstanceMetadataServiceConfigurationDetails**

Information on the instance metadata service (IMDS) configuration of the notebook instance.

**Contents**

**MinimumInstanceMetadataServiceVersion**

Indicates the minimum IMDS version that the notebook instance supports.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS Secrets Manager objects**

**AWS Secrets Manager objects**

- [AwsSecretsManagerSecretDetails](#) (p. 1221)
- [AwsSecretsManagerSecretRotationRules](#) (p. 1223)
**AwsSecretsManagerSecretDetails**
Details about an AWS Secrets Manager secret.

**Contents**

**Deleted**
Whether the secret is deleted.
Type: Boolean
Required: No

**Description**
The user-provided description of the secret.
Type: String
Pattern: .*\S.*
Required: No

**KmsKeyId**
The ARN, Key ID, or alias of the AWS KMS key used to encrypt the SecretString or SecretBinary values for versions of this secret.
Type: String
Pattern: .*\S.*
Required: No

**Name**
The name of the secret.
Type: String
Pattern: .*\S.*
Required: No

**RotationEnabled**
Whether rotation is enabled.
Type: Boolean
Required: No

**RotationLambdaArn**
The ARN of the Lambda function that rotates the secret.
Type: String
Pattern: .*\S.*
Required: No

**RotationOccurredWithinFrequency**
Whether the rotation occurred within the specified rotation frequency.
Type: Boolean
Required: No

**RotationRules**

Defines the rotation schedule for the secret.

Type: [AwsSecretsManagerSecretRotationRules](p. 1223) object
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsSecretsManagerSecretRotationRules**

Defines the rotation schedule for the secret.

**Contents**

**AutomaticallyAfterDays**

The number of days after the previous rotation to rotate the secret.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**Amazon Simple Notification Service (SNS) objects**

**Amazon Simple Notification Service (SNS) objects**

- [AwsSnsTopicDetails](p. 1224)
- [AwsSnsTopicSubscription](p. 1227)
**AwsSnsTopicDetails**

Provides information about an Amazon SNS topic to which notifications can be published.

**Contents**

**ApplicationSuccessFeedbackRoleArn**

Indicates failed message delivery status for an Amazon SNS topic that is subscribed to a platform application endpoint.

Type: String

Pattern: .*\S.*

Required: No

**FirehoseFailureFeedbackRoleArn**

Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon Kinesis Data Firehose endpoint.

Type: String

Pattern: .*\S.*

Required: No

**FirehoseSuccessFeedbackRoleArn**

Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon Kinesis Data Firehose endpoint.

Type: String

Pattern: .*\S.*

Required: No

**HttpFailureFeedbackRoleArn**

Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

Type: String

Pattern: .*\S.*

Required: No

**HttpSuccessFeedbackRoleArn**

Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an HTTP endpoint.

Type: String

Pattern: .*\S.*

Required: No

**KmsMasterKeyId**

The ID of an AWS managed key for Amazon SNS or a customer managed key.
**Owner**

The subscription's owner.

Type: String

Pattern: .*

Required: No

**SqsFailureFeedbackRoleArn**

Indicates failed message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

Type: String

Pattern: .*

Required: No

**SqsSuccessFeedbackRoleArn**

Indicates successful message delivery status for an Amazon SNS topic that is subscribed to an Amazon SQS endpoint.

Type: String

Pattern: .*

Required: No

**Subscription**

Subscription is an embedded property that describes the subscription endpoints of an Amazon SNS topic.

Type: Array of `AwsSnsTopicSubscription` objects

Required: No

**TopicName**

The name of the Amazon SNS topic.

Type: String

Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-c++/dev-guide/api-reference.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-golang/latest/api-reference.html)
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsSnsTopicSubscription**

A wrapper type for the attributes of an Amazon SNS subscription.

**Contents**

**Endpoint**

The subscription's endpoint (format depends on the protocol).

- Type: String
- Pattern: .\S.*
- Required: No

**Protocol**

The subscription's protocol.

- Type: String
- Pattern: .\S.*
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://aws.amazon.com/sdk-for-java/)
- [AWS SDK for Ruby V3](https://aws.amazon.com/sdk-for-ruby/)

**Amazon Simple Queue Service (SQS) objects**

**Amazon SQS objects**

- [AwsSqsQueueDetails (p. 1228)](#)
**AwsSqsQueueDetails**

Data about a queue.

**Contents**

**DeadLetterTargetArn**

The ARN of the dead-letter queue to which Amazon SQS moves messages after the value of `maxReceiveCount` is exceeded.

Type: String

Pattern: .*\S.*

Required: No

**KmsDataKeyReusePeriodSeconds**

The length of time, in seconds, for which Amazon SQS can reuse a data key to encrypt or decrypt messages before calling AWS KMS again.

Type: Integer

Required: No

**KmsMasterKeyId**

The ID of an AWS managed key for Amazon SQS or a custom KMS key.

Type: String

Pattern: .*\S.*

Required: No

**QueueName**

The name of the new queue.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS Systems Manager objects**

**AWS Systems Manager objects**

- **AwsSsmComplianceSummary** *(p. 1230)*
• **AwsSsmPatch** *(p. 1233)*
• **AwsSsmPatchComplianceDetails** *(p. 1234)*
**AwsSsmComplianceSummary**

Provides the details about the compliance status for a patch.

**Contents**

**ComplianceType**

The type of resource for which the compliance was determined. For AwsSsmPatchCompliance, ComplianceType is Patch.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**CompliantCriticalCount**

For the patches that are compliant, the number that have a severity of CRITICAL.

- **Type:** Integer
- **Required:** No

**CompliantHighCount**

For the patches that are compliant, the number that have a severity of HIGH.

- **Type:** Integer
- **Required:** No

**CompliantInformationalCount**

For the patches that are compliant, the number that have a severity of INFORMATIONAL.

- **Type:** Integer
- **Required:** No

**CompliantLowCount**

For the patches that are compliant, the number that have a severity of LOW.

- **Type:** Integer
- **Required:** No

**CompliantMediumCount**

For the patches that are compliant, the number that have a severity of MEDIUM.

- **Type:** Integer
- **Required:** No

**CompliantUnspecifiedCount**

For the patches that are compliant, the number that have a severity of UNSPECIFIED.

- **Type:** Integer
- **Required:** No
ExecutionType

The type of execution that was used determine compliance.

Type: String
Pattern: .*\S.*
Required: No

NonCompliantCriticalCount

For the patch items that are noncompliant, the number of items that have a severity of CRITICAL.

Type: Integer
Required: No

NonCompliantHighCount

For the patches that are noncompliant, the number that have a severity of HIGH.

Type: Integer
Required: No

NonCompliantInformationalCount

For the patches that are noncompliant, the number that have a severity of INFORMATIONAL.

Type: Integer
Required: No

NonCompliantLowCount

For the patches that are noncompliant, the number that have a severity of LOW.

Type: Integer
Required: No

NonCompliantMediumCount

For the patches that are noncompliant, the number that have a severity of MEDIUM.

Type: Integer
Required: No

NonCompliantUnspecifiedCount

For the patches that are noncompliant, the number that have a severity of UNSPECIFIED.

Type: Integer
Required: No

OverallSeverity

The highest severity for the patches. Valid values are as follows:

- CRITICAL
- HIGH
- MEDIUM
- LOW
- INFORMATIONAL
- UNSPECIFIED

Type: String
Pattern: .*

Required: No

**PatchBaselineId**

The identifier of the patch baseline. The patch baseline lists the patches that are approved for installation.

Type: String
Pattern: .*

Required: No

**PatchGroup**

The identifier of the patch group for which compliance was determined. A patch group uses tags to group EC2 instances that should have the same patch compliance.

Type: String
Pattern: .*

Required: No

**Status**

The current patch compliance status. Valid values are as follows:

- COMPLIANT
- NON_COMPLIANT
- UNSPECIFIED_DATA

Type: String
Pattern: .*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsSsmPatch**

Provides details about the compliance for a patch.

**Contents**

**ComplianceSummary**

The compliance status details for the patch.

Type: [AwsSsmComplianceSummary (p. 1230)](p. 1230) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsSsmPatchComplianceDetails**

Provides information about the state of a patch on an instance based on the patch baseline that was used to patch the instance.

**Contents**

**Patch**

Information about the status of a patch.

Type: *AwsSsmPatch* (p. 1233) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

**AWS Step Functions objects**

**AWS Step Functions objects**

- [AwsStepFunctionStateMachineDetails (p. 1235)](#)
- [AwsStepFunctionStateMachineLoggingConfigurationDestinationsCloudWatchLogsLogGroupDetails (p. 1237)](#)
- [AwsStepFunctionStateMachineLoggingConfigurationDestinationsDetails (p. 1238)](#)
- [AwsStepFunctionStateMachineLoggingConfigurationDetails (p. 1239)](#)
- [AwsStepFunctionStateMachineTracingConfigurationDetails (p. 1240)](#)
**AwsStepFunctionStateMachineDetails**

Provides details about an AWS Step Functions state machine, which is a workflow consisting of a series of event-driven steps.

**Contents**

**Label**

A user-defined or an auto-generated string that identifies a Map state. This parameter is present only if the stateMachineArn specified in input is a qualified state machine ARN.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**LoggingConfiguration**

Used to set CloudWatch Logs options.

- **Type:** [AwsStepFunctionStateMachineLoggingConfigurationDetails](p. 1239) object
- **Required:** No

**Name**

The name of the state machine.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**RoleArn**

The Amazon Resource Name (ARN) of the IAM role used when creating this state machine.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**StateMachineArn**

The ARN that identifies the state machine.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No

**Status**

The current status of the state machine.

- **Type:** String
- **Pattern:** .*\S.*
- **Required:** No
**TracingConfiguration**

Specifies whether AWS X-Ray tracing is enabled.

Type: `AwsStepFunctionStateMachineTracingConfigurationDetails (p. 1240)` object

Required: No

**Type**

The type of the state machine (STANDARD or EXPRESS).

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsStepFunctionStateMachineLoggingConfigurationDestinationsCloudWatchLogsLogGroupDetails**


## Contents

**LogGroupArn**

The ARN (ends with : *) of the CloudWatch Logs log group to which you want your logs emitted.

- **Type:** String
- **Pattern:** .*
- **Required:** No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/aws-cpp-sdk-api-introduction.html)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/java-sdk/latest/APIReference/API.html)
- [AWS SDK for Ruby V3](https://github.com/aws/aws-sdk-ruby)

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**AwsStepFunctionStateMachineLoggingConfigurationDestinationsDetails**

An array of objects that describes where your execution history events will be logged.

**Contents**

**CloudWatchLogsLogGroup**

An object describing a CloudWatch Logs log group. For more information, see [AWS::Logs::LogGroup](#) in the *AWS CloudFormation User Guide*.

Type: [AwsStepFunctionStateMachineLoggingConfigurationDestinationsCloudWatchLogsLogGroupDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsStepFunctionStateMachineLoggingConfigurationDetails**

The `LoggingConfiguration` data type is used to set CloudWatch Logs options.

**Contents**

**Destinations**

An array of objects that describes where your execution history events will be logged.

Type: Array of `AwsStepFunctionStateMachineLoggingConfigurationDestinationsDetails` objects

Required: No

**IncludeExecutionData**

Determines whether execution data is included in your log. When set to false, data is excluded.

Type: Boolean

Required: No

**Level**

Defines which category of execution history events are logged.

Type: String

Pattern: `.*\S.*`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsStepFunctionStateMachineTracingConfigurationDetails**

Specifies whether AWS X-Ray tracing is enabled.

**Contents**

**Enabled**

When set to true, AWS X-Ray tracing is enabled.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

**AWS WAF objects**

**AWS WAF objects**

- AwsWafRateBasedRuleDetails (p. 1242)
- AwsWafRateBasedRuleMatchPredicate (p. 1244)
- AwsWafRegionalRateBasedRuleDetails (p. 1245)
- AwsWafRegionalRateBasedRuleMatchPredicate (p. 1247)
- AwsWafRegionalRuleDetails (p. 1248)
- AwsWafRegionalRuleGroupDetails (p. 1249)
- AwsWafRegionalRuleGroupRulesActionDetails (p. 1250)
- AwsWafRegionalRuleGroupRulesDetails (p. 1251)
- AwsWafRegionalRulePredicateListDetails (p. 1252)
- AwsWafRegionalWebAclDetails (p. 1253)
- AwsWafRegionalWebAclRulesListActionDetails (p. 1255)
- AwsWafRegionalWebAclRulesListDetails (p. 1256)
- AwsWafRegionalWebAclRulesListOverrideActionDetails (p. 1258)
- AwsWafRuleDetails (p. 1259)
- AwsWafRuleGroupDetails (p. 1260)
- AwsWafRuleGroupRulesActionDetails (p. 1261)
- AwsWafRuleGroupRulesDetails (p. 1262)
- AwsWafRulePredicateListDetails (p. 1263)
- AwsWafv2ActionAllowDetails (p. 1264)
- AwsWafv2ActionBlockDetails (p. 1265)
- AwsWafv2CustomHttpHeader (p. 1266)
- AwsWafv2CustomRequestHandlingDetails (p. 1267)
- AwsWafv2CustomResponseDetails (p. 1268)
• `AwsWafV2RuleGroupDetails` (p. 1269)
• `AwsWafV2RulesActionCaptchaDetails` (p. 1271)
• `AwsWafV2RulesActionCountDetails` (p. 1272)
• `AwsWafV2RulesActionDetails` (p. 1273)
• `AwsWafV2RulesDetails` (p. 1274)
• `AwsWafV2VisibilityConfigDetails` (p. 1276)
• `AwsWafV2WebAclActionDetails` (p. 1277)
• `AwsWafV2WebAclCaptchaConfigDetails` (p. 1278)
• `AwsWafV2WebAclCaptchaConfigImmunityTimePropertyDetails` (p. 1279)
• `AwsWafV2WebAclDetails` (p. 1280)
• `AwsWafWebAclDetails` (p. 1282)
• `AwsWafWebAclRule` (p. 1283)
• `WafAction` (p. 1285)
• `WafExcludedRule` (p. 1286)
• `WafOverrideAction` (p. 1287)
**AwsWafRateBasedRuleDetails**

Details about a rate-based rule for global resources. A rate-based rule provides settings to indicate when to allow, block, or count a request. Rate-based rules include the number of requests that arrive over a specified period of time.

**Contents**

**MatchPredicates**

The predicates to include in the rate-based rule.

Type: Array of *AwsWafRateBasedRuleMatchPredicate* (p. 1244) objects

Required: No

**MetricName**

The name of the metrics for the rate-based rule.

Type: String

Pattern: `.\S.*`

Required: No

**Name**

The name of the rate-based rule.

Type: String

Pattern: `.\S.*`

Required: No

**RateKey**

The field that AWS WAF uses to determine whether requests are likely arriving from single source and are subject to rate monitoring.

Type: String

Pattern: `.\S.*`

Required: No

**RateLimit**

The maximum number of requests that have an identical value for the field specified in RateKey that are allowed within a five-minute period. If the number of requests exceeds RateLimit and the other predicates specified in the rule are met, AWS WAF triggers the action for the rule.

Type: Long

Required: No

**RuleId**

The unique identifier for the rate-based rule.

Type: String

Pattern: `.\S.*`
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsWafRateBasedRuleMatchPredicate

A match predicate. A predicate might look for characteristics such as specific IP addresses, geographic locations, or sizes.

Contents

DataId

The unique identifier for the predicate.

Type: String
Pattern: .\S.*
Required: No

Negated

If set to true, then the rule actions are performed on requests that match the predicate settings.

If set to false, then the rule actions are performed on all requests except those that match the predicate settings.

Type: Boolean
Required: No

Type

The type of predicate. Valid values are as follows:
• ByteMatch
• GeoMatch
• IPMatch
• RegexMatch
• SizeConstraint
• SqlInjectionMatch
• XssMatch

Type: String
Pattern: .\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsWafRegionalRateBasedRuleDetails**

contains details about a rate-based rule for Regional resources. A rate-based rule provides settings to indicate when to allow, block, or count a request. Rate-based rules include the number of requests that arrive over a specified period of time.

**Contents**

**MatchPredicates**

The predicates to include in the rate-based rule.

- Type: Array of [AwsWafRegionalRateBasedRuleMatchPredicate](#) objects
- Required: No

**MetricName**

The name of the metrics for the rate-based rule.

- Type: String
- Pattern: .*
- Required: No

**Name**

The name of the rate-based rule.

- Type: String
- Pattern: .*
- Required: No

**RateKey**

The field that AWS WAF uses to determine whether requests are likely arriving from single source and are subject to rate monitoring.

- Type: String
- Pattern: .*
- Required: No

**RateLimit**

The maximum number of requests that have an identical value for the field specified in RateKey that are allowed within a five-minute period. If the number of requests exceeds RateLimit and the other predicates specified in the rule are met, AWS WAF triggers the action for the rule.

- Type: Long
- Required: No

**RuleId**

The unique identifier for the rate-based rule.

- Type: String
- Pattern: .*

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1245
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRegionalRateBasedRuleMatchPredicate**

Details for a match predicate. A predicate might look for characteristics such as specific IP addresses, geographic locations, or sizes.

**Contents**

**DataId**

The unique identifier for the predicate.

Type: String

Pattern: .*\S.*

Required: No

**Negated**

If set to true, then the rule actions are performed on requests that match the predicate settings.

If set to false, then the rule actions are performed on all requests except those that match the predicate settings.

Type: Boolean

Required: No

**Type**

The type of predicate. Valid values are as follows:

- ByteMatch
- GeoMatch
- IPMatch
- RegexMatch
- SizeConstraint
- SqlInjectionMatch
- XssMatch

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRegionalRuleDetails**

Provides information about an AWS WAF Regional rule. This rule identifies the web requests that you want to allow, block, or count.

**Contents**

**MetricName**

A name for the metrics for the rule.

Type: String

Pattern: .\S.*

Required: No

**Name**

A descriptive name for the rule.

Type: String

Pattern: .\S.*

Required: No

**PredicateList**

Specifies the ByteMatchSet, IPSet, SqlInjectionMatchSet, XssMatchSet, RegexMatchSet, GeoMatchSet, and SizeConstraintSet objects that you want to add to a rule and, for each object, indicates whether you want to negate the settings.

Type: Array of [AwsWafRegionalRulePredicateListDetails](p. 1252) objects

Required: No

**RuleId**

The ID of the rule.

Type: String

Pattern: .\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRegionalRuleGroupDetails**

Provides information about an AWS WAF Regional rule group. The rule group is a collection of rules for inspecting and controlling web requests.

**Contents**

**MetricName**

A name for the metrics for this rule group.

- Type: String
- Pattern: .*
- Required: No

**Name**

The descriptive name of the rule group.

- Type: String
- Pattern: .*
- Required: No

**RuleGroupId**

The ID of the rule group.

- Type: String
- Pattern: .*
- Required: No

**Rules**

Provides information about the rule statements used to identify the web requests that you want to allow, block, or count.

- Type: Array of `AwsWafRegionalRuleGroupRulesDetails` objects
- Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRegionalRuleGroupRulesActionDetails**

Describes the action that AWS WAF should take on a web request when it matches the criteria defined in the rule.

**Contents**

**Type**

Specifies the ByteMatchSet, IPSet, SqlInjectionMatchSet, XssMatchSet, RegexMatchSet, GeoMatchSet, and SizeConstraintSet objects that you want to add to a rule and, for each object, indicates whether you want to negate the settings.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRegionalRuleGroupRulesDetails**

Provides information about the rules attached to a rule group

**Contents**

**Action**

The action that AWS WAF should take on a web request when it matches the criteria defined in the rule.

Type: [AwsWafRegionalRuleGroupRulesActionDetails](#) object

Required: No

**Priority**

If you define more than one rule in a web ACL, AWS WAF evaluates each request against the rules in order based on the value of Priority.

Type: Integer

Required: No

**RuleId**

The ID for a rule.

Type: String

Pattern: .[^\S].*

Required: No

**Type**

The type of rule in the rule group.

Type: String

Pattern: .[^\S].*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRegionalRulePredicateListDetails**

Provides details about the `ByteMatchSet`, `IPSet`, `SqlInjectionMatchSet`, `XssMatchSet`, `RegexMatchSet`, `GeoMatchSet`, and `SizeConstraintSet` objects that you want to add to a rule and, for each object, indicates whether you want to negate the settings.

**Contents**

**DataId**

A unique identifier for a predicate in a rule, such as `ByteMatchSetId` or `IPSetId`.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**Negated**

Specifies if you want AWS WAF to allow, block, or count requests based on the settings in the `ByteMatchSet`, `IPSet`, `SqlInjectionMatchSet`, `XssMatchSet`, `RegexMatchSet`, `GeoMatchSet`, or `SizeConstraintSet`.

- **Type:** Boolean
- **Required:** No

**Type**

The type of predicate in a rule, such as `ByteMatch` or `IPSet`.

- **Type:** String
- **Pattern:** .*
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRegionalWebAclDetails**

Provides information about the web access control list (web ACL). The web ACL contains the rules that identify the requests that you want to allow, block, or count.

**Contents**

**DefaultAction**

The action to perform if none of the rules contained in the web ACL match.

- **Type:** String
- **Pattern:** .\S\.
- **Required:** No

**MetricName**

A name for the metrics for this web ACL.

- **Type:** String
- **Pattern:** .\S\.
- **Required:** No

**Name**

A descriptive name for the web ACL.

- **Type:** String
- **Pattern:** .\S\.
- **Required:** No

**RulesList**

An array that contains the action for each rule in a web ACL, the priority of the rule, and the ID of the rule.

- **Type:** Array of [**AwsWafRegionalWebAclRulesListDetails**](p. 1256) objects
- **Required:** No

**WebAclId**

The ID of the web ACL.

- **Type:** String
- **Pattern:** .\S\.
- **Required:** No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
AwsWafRegionalWebAclRulesListActionDetails

The action that AWS WAF takes when a web request matches all conditions in the rule, such as allow, block, or count the request.

Contents

Type

For actions that are associated with a rule, the action that AWS WAF takes when a web request matches all conditions in a rule.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRegionalWebAclRulesListDetails**

A combination of ByteMatchSet, IPSet, and/or SqlInjectionMatchSet objects that identify the web requests that you want to allow, block, or count.

**Contents**

**Action**

The action that AWS WAF takes when a web request matches all conditions in the rule, such as allow, block, or count the request.

Type: [AwsWafRegionalWebAclRulesListActionDetails (p. 1255)](p. 1255) object

Required: No

**OverrideAction**

Overrides the rule evaluation result in the rule group.

Type: [AwsWafRegionalWebAclRulesListOverrideActionDetails (p. 1258)](p. 1258) object

Required: No

**Priority**

The order in which AWS WAF evaluates the rules in a web ACL.

Type: Integer

Required: No

**RuleId**

The ID of an AWS WAF Regional rule to associate with a web ACL.

Type: String

Pattern: .\S. *

Required: No

**Type**

For actions that are associated with a rule, the action that AWS WAF takes when a web request matches all conditions in a rule.

Type: String

Pattern: .\S. *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](aws-sdk-cpp)
- [AWS SDK for Go](aws-sdk-go)
- [AWS SDK for Java V2](aws-sdk-java)
- [AWS SDK for Ruby V3](aws-sdk-ruby-v3)
AwsWafRegionalWebAclRulesListOverrideActionDetails

Provides details about the action to use in the place of the action that results from the rule group evaluation.

Contents

Type

Overrides the rule evaluation result in the rule group.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRuleDetails**

Provides information about a AWS WAF rule. This rule specifies the web requests that you want to allow, block, or count.

**Contents**

**MetricName**

The name of the metrics for this rule.

Type: String

Pattern: .*\S.*

Required: No

**Name**

A descriptive name for the rule.

Type: String

Pattern: .*\S.*

Required: No

**PredicateList**

Specifies the ByteMatchSet, IPSet, SqlInjectionMatchSet, XssMatchSet, RegexMatchSet, GeoMatchSet, and SizeConstraintSet objects that you want to add to a rule and, for each object, indicates whether you want to negate the settings.

Type: Array of [AwsWafRulePredicateListDetails](p. 1263) objects

Required: No

**RuleId**

The ID of the AWS WAF rule.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafRuleGroupDetails**

Provides information about an AWS WAF rule group. A rule group is a collection of rules for inspecting and controlling web requests.

**Contents**

**MetricName**

The name of the metrics for this rule group.

Type: String

Pattern: .\S. *

Required: No

**Name**

The name of the rule group.

Type: String

Pattern: .\S. *

Required: No

**RuleGroupId**

The ID of the rule group.

Type: String

Pattern: .\S. *

Required: No

**Rules**

Provides information about the rules attached to the rule group. These rules identify the web requests that you want to allow, block, or count.

Type: Array of [AwsWafRuleGroupRulesDetails (p. 1262)](https://aws.amazon.com) objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://aws.amazon.com)
- [AWS SDK for Go](https://aws.amazon.com)
- [AWS SDK for Java V2](https://aws.amazon.com)
- [AWS SDK for Ruby V3](https://aws.amazon.com)
AwsWafRuleGroupRulesActionDetails

Provides information about what action AWS WAF should take on a web request when it matches the criteria defined in the rule.

Contents

Type

The action that AWS WAF should take on a web request when it matches the rule's statement.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRuleGroupRulesDetails**

Provides information about the rules attached to the rule group. These rules identify the web requests that you want to allow, block, or count.

**Contents**

**Action**

Provides information about what action AWS WAF should take on a web request when it matches the criteria defined in the rule.

Type: [AwsWafRuleGroupRulesActionDetails](p. 1261) object

Required: No

**Priority**

If you define more than one rule in a web ACL, AWS WAF evaluates each request against the rules in order based on the value of Priority.

Type: Integer

Required: No

**RuleId**

The rule ID for a rule.

Type: String

Pattern: .*\S.*

Required: No

**Type**

The type of rule.

Type: String

Pattern: .*\S.*

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafRulePredicateListDetails**

Provides details about the ByteMatchSet, IPSet, SqlInjectionMatchSet, XssMatchSet, RegexMatchSet, GeoMatchSet, and SizeConstraintSet objects that you want to add to a rule and, for each object, indicates whether you want to negate the settings.

**Contents**

**DataId**

A unique identifier for a predicate in a rule, such as ByteMatchSetId or IPSetId.

*Type:* String  
*Pattern:* .*$  
*Required:* No

**Negated**

Specifies if you want AWS WAF to allow, block, or count requests based on the settings in the ByteMatchSet, IPSet, SqlInjectionMatchSet, XssMatchSet, RegexMatchSet, GeoMatchSet, or SizeConstraintSet.

*Type:* Boolean  
*Required:* No

**Type**

The type of predicate in a rule, such as ByteMatch or IPSet.

*Type:* String  
*Pattern:* .*$  
*Required:* No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafv2ActionAllowDetails**

Specifies that AWS WAF should allow the request and optionally defines additional custom handling for the request.

**Contents**

**CustomRequestHandling**

Defines custom handling for the web request. For information about customizing web requests and responses, see Customizing web requests and responses in AWS WAF in the AWS WAF Developer Guide.

Type: [AwsWafv2CustomRequestHandlingDetails (p. 1267)](p. 1267) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafv2ActionBlockDetails**

Specifies that AWS WAF should block the request and optionally defines additional custom handling for the response to the web request.

**Contents**

**CustomResponse**

 Defines a custom response for the web request. For information, see [Customizing web requests and responses in AWS WAF](https://docs.aws.amazon.com/waf/latest/developerguide/custom-web-requests-and-responses.html) in the *AWS WAF Developer Guide*.

Type: *AwsWafv2CustomResponseDetails (p. 1268)* object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/api-reference-aws-wafv2.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/waf/latest/developerguide/wafv2-api-reference-summary.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/waf/latest/developerguide/wafv2-api-reference-summary.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/waf/latest/developerguide/wafv2-api-reference-summary.html)
AwsWafv2CustomHttpHeader

A custom header for custom request and response handling.

Contents

Name

The name of the custom header.

Type: String

Pattern: .\S. *

Required: No

Value

The value of the custom header.

Type: String

Pattern: .\S. *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafv2CustomRequestHandlingDetails**

Custom request handling behavior that inserts custom headers into a web request. AWS WAF uses custom request handling when the rule action doesn't block the request.

**Contents**

**InsertHeaders**

The HTTP headers to insert into the request.

Type: Array of [AwsWafv2CustomHttpHeader (p. 1266)] objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafv2CustomResponseDetails**

A custom response to send to the client. You can define a custom response for rule actions and default web ACL actions that are set to block.

**Contents**

**CustomResponseBodyKey**

References the response body that you want AWS WAF to return to the web request client. You can define a custom response for a rule action or a default web ACL action that is set to block.

Type: String

Pattern: .*\\S.*

Required: No

**ResponseCode**

The HTTP status code to return to the client. For a list of status codes that you can use in your custom responses, see Supported status codes for custom response in the AWS WAF Developer Guide.

Type: Integer

Required: No

**ResponseHeaders**

The HTTP headers to use in the response.

Type: Array of AwsWafv2CustomHttpHeader objects

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafv2RuleGroupDetails**

Details about an AWS WAFv2 rule group.

**Contents**

**Arn**

The Amazon Resource Name (ARN) of the entity.

Type: String

Pattern: .*\S.*

Required: No

**Capacity**

The web ACL capacity units (WCUs) required for this rule group.

Type: Long

Required: No

**Description**

A description of the rule group that helps with identification.

Type: String

Pattern: .*\S.*

Required: No

**Id**

A unique identifier for the rule group.

Type: String

Pattern: .*\S.*

Required: No

**Name**

The name of the rule group. You cannot change the name of a rule group after you create it.

Type: String

Pattern: .*\S.*

Required: No

**Rules**

The Rule statements used to identify the web requests that you want to allow, block, or count. Each rule includes one top-level statement that AWS WAF uses to identify matching web requests, and parameters that govern how AWS WAF handles them.

Type: Array of *AwsWafv2RulesDetails* objects

Required: No
Scope

Specifies whether the rule group is for an Amazon CloudFront distribution or for a regional application. A regional application can be an Application Load Balancer (ALB), an Amazon API Gateway REST API, an AWS AppSync GraphQL API, or an Amazon Cognito user pool.

Type: String

Pattern: .*\S.*

Required: No

VisibilityConfig

Defines and enables Amazon CloudWatch metrics and web request sample collection.

Type: `AwsWafv2VisibilityConfigDetails (p. 1276)` object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
**AwsWafv2RulesActionCaptchaDetails**

Specifies that AWS WAF should run a CAPTCHA check against the request.

**Contents**

**CustomRequestHandling**

Defines custom handling for the web request, used when the CAPTCHA inspection determines that the request's token is valid and unexpired. For more information, see [Customizing web requests and responses in AWS WAF](https://docs.aws.amazon.com/waf/latest/developerguide/request-handling-custom-validator.html) in the *AWS WAF Developer Guide*.

Type: `AwsWafv2CustomRequestHandlingDetails` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/aws-cpp-sdk-api-index.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/v1/developer-guide/aws-cpp-sdk-api-index.html)
- [AWS SDK for Java V2](https://docs.aws.amazon.com/sdk-for-java/v1/developer-guide/aws-cpp-sdk-api-index.html)
**AwsWafv2RulesActionCountDetails**

Specifies that AWS WAF should count the request.

**Contents**

**CustomRequestHandling**

Defines custom handling for the web request. For more information, see [Customizing web requests and responses in AWS WAF](https://docs.aws.amazon.com/waf/latest/developerguide/customizing-web-requests.html) in the *AWS WAF Developer Guide*.

Type: [AwsWafv2CustomRequestHandlingDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/call/endpoints.html)
- [AWS SDK for Go](https://docs.aws.amazon.com/sdk-for-go/api/aws/wafv2/
- [AWS SDK for Java V2](https://docs.aws.amazon.com/awswaf/latest/devguide/customizing-web-requests.html)
- [AWS SDK for Ruby V3](https://docs.aws.amazon.com/awswaf/latest/devguide/customizing-web-requests.html)
**AwsWafv2RulesActionDetails**

The action that AWS WAF should take on a web request when it matches a rule's statement. Settings at the web ACL level can override the rule action setting.

**Contents**

**Allow**

Instructs AWS WAF to allow the web request.

Type: `AwsWafv2ActionAllowDetails (p. 1264)` object

Required: No

**Block**

Instructs AWS WAF to block the web request.

Type: `AwsWafv2ActionBlockDetails (p. 1265)` object

Required: No

**Captcha**

Instructs AWS WAF to run a CAPTCHA check against the web request.

Type: `AwsWafv2RulesActionCaptchaDetails (p. 1271)` object

Required: No

**Count**

Instructs AWS WAF to count the web request and then continue evaluating the request using the remaining rules in the web ACL.

Type: `AwsWafv2RulesActionCountDetails (p. 1272)` object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafv2RulesDetails**

Provides details about rules in a rule group. A rule identifies web requests that you want to allow, block, or count. Each rule includes one top-level Statement that AWS WAF uses to identify matching web requests, and parameters that govern how AWS WAF handles them.

**Contents**

**Action**

The action that AWS WAF should take on a web request when it matches the rule statement. Settings at the web ACL level can override the rule action setting.

Type: [AwsWafv2RulesActionDetails](#) object

Required: No

**Name**

The name of the rule.

Type: String

Pattern: .*

Required: No

**OverrideAction**

The action to use in the place of the action that results from the rule group evaluation.

Type: String

Pattern: .*

Required: No

**Priority**

If you define more than one Rule in a WebACL, AWS WAF evaluates each request against the Rules in order based on the value of Priority. AWS WAF processes rules with lower priority first. The priorities don't need to be consecutive, but they must all be different.

Type: Integer

Required: No

**VisibilityConfig**

Defines and enables Amazon CloudWatch metrics and web request sample collection.

Type: [AwsWafv2VisibilityConfigDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
• AWS SDK for Ruby V3
**AwsWafv2VisibilityConfigDetails**

Defines and enables Amazon CloudWatch metrics and web request sample collection.

**Contents**

**CloudWatchMetricsEnabled**

A boolean indicating whether the associated resource sends metrics to Amazon CloudWatch. For the list of available metrics, see [AWS WAF metrics and dimensions](https://docs.aws.amazon.com/waf/latest/developerguide/aws-waf-metrics-and-dimensions.html) in the *AWS WAF Developer Guide*.

Type: Boolean

Required: No

**MetricName**

A name of the Amazon CloudWatch metric.

Type: String

Pattern: .[^\s].*

Required: No

**SampledRequestsEnabled**

A boolean indicating whether AWS WAF should store a sampling of the web requests that match the rules. You can view the sampled requests through the AWS WAF console.

Type: Boolean

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](https://docs.aws.amazon.com/sdk-for-cpp/v1/developer-guide/callers.html)
- [AWS SDK for Go](https://github.com/aws/aws-sdk-go)
- [AWS SDK for Java V2](https://github.com/aws/aws-sdk-java)
- [AWS SDK for Ruby V3](https://github.com/aws/aws-sdk-ruby)
**AwsWafv2WebAclActionDetails**

Specifies the action that Amazon CloudFront or AWS WAF takes when a web request matches the conditions in the rule.

**Contents**

**Allow**

Specifies that AWS WAF should allow requests by default.

Type: [AwsWafv2ActionAllowDetails](p. 1264) object

Required: No

**Block**

Specifies that AWS WAF should block requests by default.

Type: [AwsWafv2ActionBlockDetails](p. 1265) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafv2WebAclCaptchaConfigDetails**

Specifies how AWS WAF should handle CAPTCHA evaluations for rules that don't have their own CaptchaConfig settings.

**Contents**

**ImmunityTimeProperty**

Determines how long a CAPTCHA timestamp in the token remains valid after the client successfully solves a CAPTCHA puzzle.

Type: *AwsWafv2WebAclCaptchaConfigImmunityTimePropertyDetails (p. 1279)* object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsWafv2WebAclCaptchaConfigImmunityTimePropertyDetails

Used for CAPTCHA and challenge token settings. Determines how long a CAPTCHA or challenge timestamp remains valid after AWS WAF updates it for a successful CAPTCHA or challenge response.

Contents

ImmunityTime

The amount of time, in seconds, that a CAPTCHA or challenge timestamp is considered valid by AWS WAF.

Type: Long

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**AwsWafv2WebAclDetails**

Details about an AWS WAFv2 web Access Control List (ACL).

**Contents**

**Arn**

The Amazon Resource Name (ARN) of the web ACL that you want to associate with the resource.

Type: String

Pattern: .*\S.*

Required: No

**Capacity**

The web ACL capacity units (WCUs) currently being used by this web ACL.

Type: Long

Required: No

**CaptchaConfig**

Specifies how AWS WAF should handle CAPTCHA evaluations for rules that don't have their own CaptchaConfig settings.

Type: [AwsWafv2WebAclCaptchaConfigDetails](p. 1278) object

Required: No

**DefaultAction**

The action to perform if none of the Rules contained in the web ACL match.

Type: [AwsWafv2WebAclActionDetails](p. 1277) object

Required: No

**Description**

A description of the web ACL that helps with identification.

Type: String

Pattern: .*\S.*

Required: No

**Id**

A unique identifier for the web ACL.

Type: String

Pattern: .*\S.*

Required: No

**ManagedbyFirewallManager**

Indicates whether this web ACL is managed by AWS Firewall Manager.

Type: Boolean
Required: No

**Name**

The name of the web ACL.

Type: String

Pattern: .\s.*

Required: No

**Rules**

The Rule statements used to identify the web requests that you want to allow, block, or count. Each rule includes one top-level statement that AWS WAF uses to identify matching web requests, and parameters that govern how AWS WAF handles them.

Type: Array of [AwsWafv2RulesDetails](#) objects

Required: No

**VisibilityConfig**

Defines and enables Amazon CloudWatch metrics and web request sample collection.

Type: [AwsWafv2VisibilityConfigDetails](#) object

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AwsWafWebAclDetails

Provides information about an AWS WAF web access control list (web ACL).

Contents

DefaultAction

The action to perform if none of the rules contained in the web ACL match.

Type: String

Pattern: . *\S . *

Required: No

Name

A friendly name or description of the web ACL. You can't change the name of a web ACL after you create it.

Type: String

Pattern: . *\S . *

Required: No

Rules

An array that contains the action for each rule in a web ACL, the priority of the rule, and the ID of the rule.

Type: Array of AwsWafWebAclRule (p. 1283) objects

Required: No

WebAclId

A unique identifier for a web ACL.

Type: String

Pattern: . *\S . *

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
**AwsWafWebAclRule**

Details for a rule in an AWS WAF web ACL.

**Contents**

**Action**

Specifies the action that CloudFront or AWS WAF takes when a web request matches the conditions in the rule.

Type: [WafAction](p. 1285) object

Required: No

**ExcludedRules**

Rules to exclude from a rule group.

Type: Array of [WafExcludedRule](p. 1286) objects

Required: No

**OverrideAction**

Use the OverrideAction to test your RuleGroup.

Any rule in a RuleGroup can potentially block a request. If you set the OverrideAction to None, the RuleGroup blocks a request if any individual rule in the RuleGroup matches the request and is configured to block that request.

However, if you first want to test the RuleGroup, set the OverrideAction to Count. The RuleGroup then overrides any block action specified by individual rules contained within the group. Instead of blocking matching requests, those requests are counted.

ActivatedRule|OverrideAction applies only when updating or adding a RuleGroup to a web ACL. In this case you do not use ActivatedRule Action. For all other update requests, ActivatedRule Action is used instead of ActivatedRule OverrideAction.

Type: [WafOverrideAction](p. 1287) object

Required: No

**Priority**

Specifies the order in which the rules in a web ACL are evaluated. Rules with a lower value for Priority are evaluated before rules with a higher value. The value must be a unique integer. If you add multiple rules to a web ACL, the values do not need to be consecutive.

Type: Integer

Required: No

**RuleId**

The identifier for a rule.

Type: String

Pattern: `.*\\S.*`

Required: No
**Type**

The rule type.

Valid values: REGULAR | RATE_BASED | GROUP

The default is REGULAR.

Type: String

Pattern: . *\\S . *

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
WafAction

Details about the action that CloudFront or AWS WAF takes when a web request matches the conditions in the rule.

Contents

Type

Specifies how you want AWS WAF to respond to requests that match the settings in a rule.

Valid settings include the following:
• ALLOW - AWS WAF allows requests
• BLOCK - AWS WAF blocks requests
• COUNT - AWS WAF increments a counter of the requests that match all of the conditions in the rule. AWS WAF then continues to inspect the web request based on the remaining rules in the web ACL. You can't specify COUNT for the default action for a web ACL.

Type: String

Pattern: .\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
WafExcludedRule

Details about a rule to exclude from a rule group.

Contents

RuleId

The unique identifier for the rule to exclude from the rule group.

Type: String
Pattern: .*\S.*
Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
WafOverrideAction

Details about an override action for a rule.

Contents

Type

- **COUNT** overrides the action specified by the individual rule within a `RuleGroup`.
  - If set to `NONE`, the rule's action takes place.
  - Type: String
  - Pattern: `.*\S.*`
  - Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

AWS X-Ray objects

- AWS X-Ray objects
  - AwsXrayEncryptionConfigDetails (p. 1288)
AwsXrayEncryptionConfigDetails

Information about the encryption configuration for AWS X-Ray.

Contents

KeyId

The identifier of the KMS key that is used for encryption. Provided if Type is KMS.

Type: String

Pattern: .*\S.*

Required: No

Status

The current status of the encryption configuration. Valid values are ACTIVE or UPDATING.

When Status is equal to UPDATING, AWS X-Ray might use both the old and new encryption.

Type: String

Pattern: .*\S.*

Required: No

Type

The type of encryption. KMS indicates that the encryption uses KMS keys. NONE indicates the default encryption.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

Container objects

Container objects

- ContainerDetails (p. 1289)
- VolumeMount (p. 1291)
ContainerDetails

Container details related to a finding.

Contents

**ContainerRuntime**

The runtime of the container.

- **Type:** String
- **Pattern:** \.*\S.*
- **Required:** No

**ImageId**

The identifier of the container image related to a finding.

- **Type:** String
- **Pattern:** \.*\S.*
- **Required:** No

**ImageName**

The name of the container image related to a finding.

- **Type:** String
- **Pattern:** \.*\S.*
- **Required:** No

**LaunchedAt**

Indicates when the container started.

Uses the date-time format specified in [RFC 3339 section 5.6, Internet Date/Time Format](https://tools.ietf.org/html/rfc3339#section-5.6). The value cannot contain spaces, and date and time should be separated by T. For example, 2020-03-22T13:22:13.933Z.

- **Type:** String
- **Pattern:** \.*\S.*
- **Required:** No

**Name**

The name of the container related to a finding.

- **Type:** String
- **Pattern:** \.*\S.*
- **Required:** No

**Privileged**

When this parameter is true, the container is given elevated privileges on the host container instance (similar to the root user).
Type: Boolean
Required: No

**VolumeMounts**

Provides information about the mounting of a volume in a container.

Type: Array of [VolumeMount (p. 1291)] objects
Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
VolumeMount

Describes the mounting of a volume in a container.

Contents

MountPath

The path in the container at which the volume should be mounted.

Type: String

Pattern: .*\S.*

Required: No

Name

The name of the volume.

Type: String

Pattern: .*\S.*

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the IAM User Guide.

**Action**

The action to be performed.

Type: string

Required: Yes

**Version**

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

**X-Amz-Algorithm**

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

**X-Amz-Credential**

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: access_key/YYYYMMDD/region/service/aws4_request.

For more information, see Create a signed AWS API request in the IAM User Guide.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the IAM User Guide.
Type: string
Required: Conditional

**X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see [AWS services that work with IAM](https://docs.aws.amazon.com/iam/latest/userguide/compatible-aws-services-list.html) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string
Required: Conditional

**X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional

**X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Create a signed AWS API request](https://docs.aws.amazon.com/iam/latest/userguide/create-signed-api-request.html) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional
Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

**AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 400

**IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 400

**InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

**InvalidAction**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

**InvalidClientTokenId**

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

**NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 400

**OptInRequired**

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

**RequestExpired**

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

**ServiceUnavailable**

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.
HTTP Status Code: 400

Validation Error

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400