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Welcome

AWS Systems Manager is a collection of capabilities that helps you automate management tasks such as collecting system inventory, applying operating system (OS) patches, automating the creation of Amazon Machine Images (AMIs), and configuring operating systems (OSs) and applications at scale. Systems Manager lets you remotely and securely manage the configuration of your managed instances. A managed instance is any Amazon EC2 instance or on-premises machine in your hybrid environment that has been configured for Systems Manager.

This reference is intended to be used with the AWS Systems Manager User Guide.

To get started, verify prerequisites and configure managed instances. For more information, see Systems Manager Prerequisites.

For information about other API actions you can perform on Amazon EC2 instances, see the Amazon EC2 API Reference. For information about how to use a Query API, see Making API Requests.

This document was last published on December 22, 2017.
Actions

The following actions are supported:

- AddTagsToResource (p. 5)
- CancelCommand (p. 8)
- CreateActivation (p. 10)
- CreateAssociation (p. 13)
- CreateAssociationBatch (p. 18)
- CreateDocument (p. 23)
- CreateMaintenanceWindow (p. 27)
- CreatePatchBaseline (p. 30)
- CreateResourceDataSync (p. 34)
- DeleteActivation (p. 36)
- DeleteAssociation (p. 38)
- DeleteDocument (p. 41)
- DeleteMaintenanceWindow (p. 43)
- DeleteParameter (p. 45)
- DeleteParameters (p. 47)
- DeletePatchBaseline (p. 49)
- DeleteResourceDataSync (p. 51)
- DeregisterManagedInstance (p. 53)
- DeregisterPatchBaselineForPatchGroup (p. 55)
- DeregisterTargetFromMaintenanceWindow (p. 57)
- DeregisterTaskFromMaintenanceWindow (p. 60)
- DescribeActivations (p. 62)
- DescribeAssociation (p. 65)
- DescribeAutomationExecutions (p. 69)
- DescribeAutomationStepExecutions (p. 72)
- DescribeAvailablePatches (p. 75)
- DescribeDocument (p. 78)
- DescribeDocumentPermission (p. 81)
- DescribeEffectiveInstanceAssociations (p. 83)
- DescribeEffectivePatchesForPatchBaseline (p. 86)
- DescribeInstanceAssociationsStatus (p. 89)
- DescribeInstanceInformation (p. 92)
- DescribeInstancePatches (p. 96)
- DescribeInstancePatchStates (p. 99)
- DescribeInstancePatchStatesForPatchGroup (p. 102)
- DescribeMaintenanceWindowExecutions (p. 105)
- DescribeMaintenanceWindowExecutionTaskInvocations (p. 108)
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• GetAutomationExecution (p. 133)
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• GetDefaultPatchBaseline (p. 142)
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• ListTagsForResource (p. 227)
• ModifyDocumentPermission (p. 229)
• PutComplianceItems (p. 232)
• PutInventory (p. 236)
• PutParameter (p. 239)
• RegisterDefaultPatchBaseline (p. 243)
• RegisterPatchBaselineForPatchGroup (p. 245)
• RegisterTargetWithMaintenanceWindow (p. 248)
• RegisterTaskWithMaintenanceWindow (p. 251)
• RemoveTagsFromResource (p. 256)
• SendAutomationSignal (p. 258)
• SendCommand (p. 260)
• StartAutomationExecution (p. 266)
• StopAutomationExecution (p. 270)
• UpdateAssociation (p. 272)
• UpdateAssociationStatus (p. 277)
• UpdateDocument (p. 280)
• UpdateDocumentDefaultVersion (p. 284)
• UpdateMaintenanceWindow (p. 286)
• UpdateMaintenanceWindowTarget (p. 290)
• UpdateMaintenanceWindowTask (p. 294)
• UpdateManagedInstanceRole (p. 302)
• UpdatePatchBaseline (p. 304)
AddTagsToResource

Adds or overwrites one or more tags for the specified resource. Tags are metadata that you can assign to your documents, managed instances, Maintenance Windows, Parameter Store parameters, and patch baselines. Tags enable you to categorize your resources in different ways, for example, by purpose, owner, or environment. Each tag consists of a key and an optional value, both of which you define. For example, you could define a set of tags for your account's managed instances that helps you track each instance's owner and stack level. For example: Key=Owner and Value=DbAdmin, SysAdmin, or Dev. Or Key=Stack and Value=Production, Pre-Production, or Test.

Each resource can have a maximum of 50 tags.

We recommend that you devise a set of tag keys that meets your needs for each resource type. Using a consistent set of tag keys makes it easier for you to manage your resources. You can search and filter the resources based on the tags you add. Tags don't have any semantic meaning to Amazon EC2 and are interpreted strictly as a string of characters.

For more information about tags, see Tagging Your Amazon EC2 Resources in the Amazon EC2 User Guide.

Request Syntax

```json
{
    "ResourceId": "string",
    "ResourceType": "string",
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

ResourceId (p. 5)

The resource ID you want to tag.

For the ManagedInstance, MaintenanceWindow, and PatchBaseline values, use the ID of the resource, such as mw-01234361858c9b57b for a Maintenance Window.

For the Document and Parameter values, use the name of the resource.

Type: String

Required: Yes

ResourceType (p. 5)

Specifies the type of resource you are tagging.

Type: String
Valid Values: Document | ManagedInstance | MaintenanceWindow | Parameter | PatchBaseline

Required: Yes

**Tags (p. 5)**

One or more tags. The value parameter is required, but if you don't want the tag to have a value, specify the parameter with no value, and we set the value to an empty string.

Type: Array of Tag (p. 459) objects

Required: Yes

**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. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidResourceId**

The resource ID is not valid. Verify that you entered the correct ID and try again.

HTTP Status Code: 400

**InvalidResourceType**

The resource type is not valid. For example, if you are attempting to tag an instance, the instance must be a registered, managed instance.

HTTP Status Code: 400

**TooManyTagsError**

The Targets parameter includes too many tags. Remove one or more tags and try the command again.

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
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
CancelCommand

Attempts to cancel the command specified by the Command ID. There is no guarantee that the command will be terminated and the underlying process stopped.

Request Syntax

```
{
  "CommandId": "string",
  "InstanceIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**CommandId (p. 8)**

The ID of the command you want to cancel.

Type: String

Length Constraints: Fixed length of 36.

Required: Yes

**InstanceIds (p. 8)**

(Optional) A list of instance IDs on which you want to cancel the command. If not provided, the command is canceled on every instance on which it was requested.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

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. 463).

**DuplicateInstanceId**

You cannot specify an instance ID in more than one association.

HTTP Status Code: 400
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidCommandId

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateActivation

Registers your on-premises server or virtual machine with Amazon EC2 so that you can manage these resources using Run Command. An on-premises server or virtual machine that has been registered with EC2 is called a managed instance. For more information about activations, see Setting Up Systems Manager in Hybrid Environments.

Request Syntax

```json
{
    "DefaultInstanceName": "string",
    "Description": "string",
    "ExpirationDate": number,
    "IamRole": "string",
    "RegistrationLimit": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

DefaultInstanceName (p. 10)

The name of the registered, managed instance as it will appear in the Amazon EC2 console or when you use the AWS command line tools to list EC2 resources.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Pattern: `^[\p{L}\p{Z}\p{S}\p{N}_.:/=\+:\-@]*$`

Required: No

Description (p. 10)

A userdefined description of the resource that you want to register with Amazon EC2.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

ExpirationDate (p. 10)

The date by which this activation request should expire. The default value is 24 hours.

Type: Timestamp

Required: No

IamRole (p. 10)

The Amazon Identity and Access Management (IAM) role that you want to assign to the managed instance.
Type: String
Length Constraints: Maximum length of 64.
Required: Yes

**RegistrationLimit (p. 10)**

Specify the maximum number of managed instances you want to register. The default value is 1 instance.

Type: Integer
Valid Range: Minimum value of 1. Maximum value of 1000.
Required: No

### Response Syntax

```json
{
  "ActivationCode": "string",
  "ActivationId": "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.

**ActivationCode (p. 11)**

The code the system generates when it processes the activation. The activation code functions like a password to validate the activation ID.

Type: String

**ActivationId (p. 11)**

The ID number generated by the system when it processed the activation. The activation ID functions like a user name.

Type: String

Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`

### Errors

For information about the errors that are common to all actions, see **Common Errors (p. 463).**

**InternalServer**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateAssociation

Associates the specified Systems Manager document with the specified instances or targets.

When you associate a document with one or more instances using instance IDs or tags, the SSM Agent running on the instance processes the document and configures the instance as specified.

If you associate a document with an instance that already has an associated document, the system throws the AssociationAlreadyExists exception.

Request Syntax

```json
{
    "AssociationName": "string",
    "DocumentVersion": "string",
    "InstanceId": "string",
    "Name": "string",
    "OutputLocation": {
        "S3Location": {
            "OutputS3BucketName": "string",
            "OutputS3KeyPrefix": "string",
            "OutputS3Region": "string"
        }
    },
    "Parameters": {
        "string": [ "string" ]
    },
    "ScheduleExpression": "string",
    "Targets": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationName (p. 13)**

Specify a descriptive name for the association.

Type: String

Pattern: `^[a-zA-Z0-9_\-\.]{3,128}$`

Required: No

**DocumentVersion (p. 13)**

The document version you want to associate with the target(s). Can be a specific version or the default version.

Type: String
Pattern: ([#]LATEST|[#]DEFAULT|^\[1-9][0-9]*)

Required: No

InstanceId (p. 13)
The instance ID.
Type: String
Pattern: (^i-\w{8}\|\w{17})|(^mi-\w{17})

Required: No

Name (p. 13)
The name of the Systems Manager document.
Type: String
Pattern: ^[a-zA-Z0-9_\-\.]\{3,128}$

Required: Yes

OutputLocation (p. 13)
An Amazon S3 bucket where you want to store the output details of the request.
Type: InstanceAssociationOutputLocation (p. 372) object

Required: No

Parameters (p. 13)
The parameters for the documents runtime configuration.
Type: String to array of strings map

Required: No

ScheduleExpression (p. 13)
A cron expression when the association will be applied to the target(s).
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

Targets (p. 13)
The targets (either instances or tags) for the association.
Type: Array of Target (p. 460) objects
Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

Response Syntax

```json
{
  "AssociationDescription": {
    "AssociationId": "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.

**AssociationDescription (p. 14)**

Information about the association.

Type: AssociationDescription (p. 316) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**AssociationAlreadyExists**

The specified association already exists.
HTTP Status Code: 400

**AssociationLimitExceeded**

You can have at most 2,000 active associations.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.

HTTP Status Code: 400

**InvalidDocumentVersion**

The document version is not valid or does not exist.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidOutputLocation**

The output location is not valid or does not exist.

HTTP Status Code: 400

**InvalidParameters**

You must specify values for all required parameters in the Systems Manager document. You can only supply values to parameters defined in the Systems Manager document.

HTTP Status Code: 400

**InvalidSchedule**

The schedule is invalid. Verify your cron or rate expression and try again.

HTTP Status Code: 400

**InvalidTarget**

The target is not valid or does not exist. It might not be configured for EC2 Systems Manager or you might not have permission to perform the operation.

HTTP Status Code: 400
UnsupportedPlatformType

The document does not support the platform type of the given instance ID(s). For example, you sent an document for a Windows instance to a Linux instance.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateAssociationBatch

Associates the specified Systems Manager document with the specified instances or targets.

When you associate a document with one or more instances using instance IDs or tags, the SSM Agent running on the instance processes the document and configures the instance as specified.

If you associate a document with an instance that already has an associated document, the system throws the AssociationAlreadyExists exception.

Request Syntax

```json
{
   "Entries": [
      {
         "AssociationName": "string",
         "DocumentVersion": "string",
         "InstanceId": "string",
         "Name": "string",
         "OutputLocation": {
            "S3Location": {
               "OutputS3BucketName": "string",
               "OutputS3KeyPrefix": "string",
               "OutputS3Region": "string"
            }
         },
         "Parameters": {
            "string": [ "string" ]
         },
         "ScheduleExpression": "string",
         "Targets": [ {
            "Key": "string",
            "Values": [ "string" ]
         } ]
      }
   ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Entries (p. 18)**

One or more associations.

Type: Array of CreateAssociationBatchRequestEntry (p. 352) objects

Array Members: Minimum number of 1 item.

Required: Yes
Response Syntax

```json
{
  "Failed": [
    {
      "Entry": {
        "AssociationName": "string",
        "DocumentVersion": "string",
        "InstanceId": "string",
        "Name": "string",
        "OutputLocation": {
          "S3Location": {
            "OutputS3BucketName": "string",
            "OutputS3KeyPrefix": "string",
            "OutputS3Region": "string"
          }
        },
        "Parameters": {
          "string": [ "string" ]
        },
        "ScheduleExpression": "string",
        "Targets": [
          {
            "Key": "string",
            "Values": [ "string" ]
          }
        ],
        "Fault": "string",
        "Message": "string"
      }
    },
    "Successful": [
      {
        "AssociationId": "string",
        "AssociationName": "string",
        "AssociationVersion": "string",
        "Date": number,
        "DocumentVersion": "string",
        "InstanceId": "string",
        "LastExecutionDate": number,
        "LastSuccessfulExecutionDate": number,
        "LastUpdateAssociationDate": number,
        "Name": "string",
        "OutputLocation": {
          "S3Location": {
            "OutputS3BucketName": "string",
            "OutputS3KeyPrefix": "string",
            "OutputS3Region": "string"
          }
        },
        "Overview": {
          "AssociationStatusAggregatedCount": {
            "string": number
          },
          "DetailedStatus": "string",
          "Status": "string"
        },
        "Parameters": {
          "string": [ "string" ]
        },
        "ScheduleExpression": "string",
        "Status": {
          "AdditionalInfo": "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.

Failed (p. 19)

Information about the associations that failed.

Type: Array of FailedCreateAssociation (p. 368) objects

Successful (p. 19)

Information about the associations that succeeded.

Type: Array of AssociationDescription (p. 316) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

AssociationLimitExceeded

You can have at most 2,000 active associations.

HTTP Status Code: 400

DuplicateInstanceId

You cannot specify an instance ID in more than one association.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidDocumentVersion

The document version is not valid or does not exist.
HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidOutputLocation**

The output location is not valid or does not exist.

HTTP Status Code: 400

**InvalidParameters**

You must specify values for all required parameters in the Systems Manager document. You can only supply values to parameters defined in the Systems Manager document.

HTTP Status Code: 400

**InvalidSchedule**

The schedule is invalid. Verify your cron or rate expression and try again.

HTTP Status Code: 400

**InvalidTarget**

The target is not valid or does not exist. It might not be configured for EC2 Systems Manager or you might not have permission to perform the operation.

HTTP Status Code: 400

**UnsupportedPlatformType**

The document does not support the platform type of the given instance ID(s). For example, you sent an document for a Windows instance to a Linux instance.

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
- AWS SDK for JavaScript
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateDocument

Creates a Systems Manager document.

After you create a document, you can use CreateAssociation to associate it with one or more running instances.

Request Syntax

```json
{
  "Content": "string",
  "DocumentFormat": "string",
  "DocumentType": "string",
  "Name": "string",
  "TargetType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Content (p. 23)**

A valid JSON or YAML string.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**DocumentFormat (p. 23)**

Specify the document format for the request. The document format can be either JSON or YAML. JSON is the default format.

Type: String

Valid Values: YAML | JSON

Required: No

**DocumentType (p. 23)**

The type of document to create. Valid document types include: Policy, Automation, and Command.

Type: String

Valid Values: Command | Policy | Automation

Required: No

**Name (p. 23)**

A name for the Systems Manager document.

Type: String
Response Syntax

Response Elements

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

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

**DocumentDescription (p. 24)**

Information about the Systems Manager document.

Type: DocumentDescription (p. 356) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DocumentAlreadyExists**

The specified document already exists.

HTTP Status Code: 400

**DocumentLimitExceeded**

You can have at most 200 active Systems Manager documents.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocumentContent**

The content for the document is not valid.

HTTP Status Code: 400

**InvalidDocumentSchemaVersion**

The version of the document schema is not supported.

HTTP Status Code: 400

**MaxDocumentSizeExceeded**

The size limit of a document is 64 KB.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
See Also

- AWS SDK for Python
- AWS SDK for Ruby V2
CreateMaintenanceWindow

Creates a new Maintenance Window.

Request Syntax

```json
{
   "AllowUnassociatedTargets": boolean,
   "ClientToken": "string",
   "Cutoff": number,
   "Description": "string",
   "Duration": number,
   "Name": "string",
   "Schedule": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AllowUnassociatedTargets (p. 27)**

Enables a Maintenance Window task to execute on managed instances, even if you have not registered those instances as targets. If enabled, then you must specify the unregistered instances (by instance ID) when you register a task with the Maintenance Window.

If you don’t enable this option, then you must specify previously-registered targets when you register a task with the Maintenance Window.

Type: Boolean

Required: Yes

**ClientToken (p. 27)**

User-provided idempotency token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Cutoff (p. 27)**

The number of hours before the end of the Maintenance Window that Systems Manager stops scheduling new tasks for execution.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 23.

Required: Yes

**Description (p. 27)**

An optional description for the Maintenance Window. We recommend specifying a description to help you organize your Maintenance Windows.
Type: String


Required: No

**Duration (p. 27)**

The duration of the Maintenance Window in hours.

Type: Integer


Required: Yes

**Name (p. 27)**

The name of the Maintenance Window.

Type: String


Pattern: ^[a-zA-Z0-9\-_\.]{3,128}$

Required: Yes

**Schedule (p. 27)**

The schedule of the Maintenance Window in the form of a cron or rate expression.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

**Response Syntax**

```
{
  "WindowId": "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.

**WindowId (p. 28)**

The ID of the created Maintenance Window.

Type: String


Pattern: ^mw-[0-9a-f]{17}$
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

IdempotentParameterMismatch

Error returned when an idempotent operation is retried and the parameters don't match the original call to the API with the same idempotency token.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

ResourceLimitExceededException

Error returned when the caller has exceeded the default resource limits. For example, too many Maintenance Windows or Patch baselines have been created.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreatePatchBaseline

Creates a patch baseline.

**Note**
For information about valid key and value pairs in `PatchFilters` for each supported operating system type, see `PatchFilter`.

**Request Syntax**

```json
{
    "ApprovalRules": {
        "PatchRules": [
            {
                "ApproveAfterDays": number,
                "ComplianceLevel": "string",
                "PatchFilterGroup": {
                    "PatchFilters": [
                        {
                            "Key": "string",
                            "Values": [ "string" ]
                        }
                    ]
                }
            }
        ],
        "ApprovedPatches": [ "string" ],
        "ApprovedPatchesComplianceLevel": "string",
        "ClientToken": "string",
        "Description": "string",
        "GlobalFilters": {
            "PatchFilters": [
                {
                    "Key": "string",
                    "Values": [ "string" ]
                }
            ]
        },
        "Name": "string",
        "OperatingSystem": "string",
        "RejectedPatches": [ "string" ]
    }
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**ApprovalRules (p. 30)**

A set of rules used to include patches in the baseline.

Type: `PatchRuleGroup (p. 441)` object

Required: No

**ApprovedPatches (p. 30)**

A list of explicitly approved patches for the baseline.
Request Parameters

**ApprovedPatchesComplianceLevel** (p. 30)

Defines the compliance level for approved patches. This means that if an approved patch is reported as missing, this is the severity of the compliance violation. Valid compliance severity levels include the following: CRITICAL, HIGH, MEDIUM, LOW, INFORMATIONAL, UNSPECIFIED. The default value is UNSPECIFIED.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: No

**ClientToken** (p. 30)

User-provided idempotency token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Description** (p. 30)

A description of the patch baseline.

Type: String


Required: No

**GlobalFilters** (p. 30)

A set of global filters used to exclude patches from the baseline.

Type: PatchFilterGroup (p. 437) object

Required: No

**Name** (p. 30)

The name of the patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9-_\.]{3,128}$

Required: Yes

**OperatingSystem** (p. 30)

Defines the operating system the patch baseline applies to. The Default value is WINDOWS.

Type: String
Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX

Required: No

RejectedPatches (p. 30)

A list of explicitly rejected patches for the baseline.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

Response Syntax

```json
{
   "BaselineId": "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.

BaselineId (p. 32)

The ID of the created patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-/:\]{20,128}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

IdempotentParameterMismatch

Error returned when an idempotent operation is retried and the parameters don't match the original call to the API with the same idempotency token.

HTTP Status Code: 400

InternalServerHTTPStatus Code: 400

Error when an error occurred on the server side.

HTTP Status Code: 400

ResourceLimitExceededException

Error returned when the caller has exceeded the default resource limits. For example, too many Maintenance Windows or Patch baselines have been created.
For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateResourceDataSync

Creates a resource data sync configuration to a single bucket in Amazon S3. This is an asynchronous operation that returns immediately. After a successful initial sync is completed, the system continuously syncs data to the Amazon S3 bucket. To check the status of the sync, use the `ListResourceDataSync` (p. 224).

By default, data is not encrypted in Amazon S3. We strongly recommend that you enable encryption in Amazon S3 to ensure secure data storage. We also recommend that you secure access to the Amazon S3 bucket by creating a restrictive bucket policy. To view an example of a restrictive Amazon S3 bucket policy for Resource Data Sync, see Configuring Resource Data Sync for Inventory.

**Request Syntax**

```json
{
   "S3Destination": {
      "AWSKMSKeyARN": "string",
      "BucketName": "string",
      "Prefix": "string",
      "Region": "string",
      "SyncFormat": "string"
   },
   "SyncName": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**S3Destination (p. 34)**

Amazon S3 configuration details for the sync.

Type: ResourceDataSyncS3Destination (p. 448) object

Required: Yes

**SyncName (p. 34)**

A name for the configuration.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

**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. 463).
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

ResourceDataSyncAlreadyExistsException

A sync configuration with the same name already exists.

HTTP Status Code: 400

ResourceDataSyncCountExceededException

You have exceeded the allowed maximum sync configurations.

HTTP Status Code: 400

ResourceDataSyncInvalidConfigurationException

The specified sync configuration is invalid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteActivation

Deletes an activation. You are not required to delete an activation. If you delete an activation, you can no longer use it to register additional managed instances. Deleting an activation does not de-register managed instances. You must manually de-register managed instances.

Request Syntax

```
{
   "ActivationId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**ActivationId (p. 36)**

- The ID of the activation that you want to delete.
- Type: String
- Pattern: `^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$`
- Required: Yes

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. 463).

**InternalServerError**

- An error occurred on the server side.
- HTTP Status Code: 400

**InvalidActivation**

- The activation is not valid. The activation might have been deleted, or the ActivationId and the ActivationCode do not match.
- HTTP Status Code: 400

**InvalidActivationId**

- The activation ID is not valid. Verify the you entered the correct ActivationId or ActivationCode and try again.
- HTTP Status Code: 400
TooManyUpdates

There are concurrent updates for a resource that supports one update at a time.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteAssociation

Disassociates the specified Systems Manager document from the specified instance.

When you disassociate a document from an instance, it does not change the configuration of the instance. To change the configuration state of an instance after you disassociate a document, you must create a new document with the desired configuration and associate it with the instance.

Request Syntax

```
{
   "AssociationId": "string",
   "InstanceId": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationId (p. 38)**

The association ID that you want to delete.

Type: String

Pattern: \[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}\]

Required: No

**InstanceId (p. 38)**

The ID of the instance.

Type: String

Pattern: (`^i-(\w{8}|\w{17})$)|(^mi\w{17}$)

Required: No

**Name (p. 38)**

The name of the Systems Manager document.

Type: String

Pattern: ^[a-zA-Z0-9\-_.]{3,128}$

Required: No

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. 463).

AssociationDoesNotExist

The specified association does not exist.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

TooManyUpdates

There are concurrent updates for a resource that supports one update at a time.

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
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DeleteDocument

Deletes the Systems Manager document and all instance associations to the document.

Before you delete the document, we recommend that you use DeleteAssociation (p. 38) to disassociate all instances that are associated with the document.

Request Syntax

```
{
  "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Name (p. 41)

- The name of the document.
- Type: String
- Pattern: ^[a-zA-Z0-9_-\.]\{3,128}$
- Required: Yes

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. 463).

AssociatedInstances

- You must disassociate a document from all instances before you can delete it.
- HTTP Status Code: 400

InternalServerError

- An error occurred on the server side.
- HTTP Status Code: 400

InvalidDocument

- The specified document does not exist.
- HTTP Status Code: 400
InvalidDocumentOperation

You attempted to delete a document while it is still shared. You must stop sharing the document before you can delete it.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteMaintenanceWindow

Deletes a Maintenance Window.

Request Syntax

```
{
    "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**WindowId (p. 43)**

The ID of the Maintenance Window to delete.

- Type: String
- Pattern: `^mw-[0-9a-f]{17}$`
- Required: Yes

Response Syntax

```
{
    "WindowId": "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.

**WindowId (p. 43)**

The ID of the deleted Maintenance Window.

- Type: String
- Pattern: `^mw-[0-9a-f]{17}$`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).
InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteParameter

Delete a parameter from the system.

Request Syntax

```json
{
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Name (p. 45)**

The name of the parameter to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

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. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**ParameterNotFound**

The parameter could not be found. Verify the name and try again.

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
See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteParameters

Delete a list of parameters. This API is used to delete parameters by using the Amazon EC2 console.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Names (p. 47)**

The names of the parameters to delete.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

Response Syntax

```
{
   "DeletedParameters": [ "string" ],
   "InvalidParameters": [ "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.

**DeletedParameters (p. 47)**

The names of the deleted parameters.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 2048.

**InvalidParameters (p. 47)**

The names of parameters that weren't deleted because the parameters are not valid.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeletePatchBaseline

Deletes a patch baseline.

Request Syntax

```
{
   "BaselineId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 49)**

The ID of the patch baseline to delete.

Type: String


Pattern: \^[a-zA-Z0-9_\-/:]{20,128}$

Required: Yes

Response Syntax

```
{
   "BaselineId": "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.

**BaselineId (p. 49)**

The ID of the deleted patch baseline.

Type: String


Pattern: \^[a-zA-Z0-9_\-/:]{20,128}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

ResourceInUseException

Error returned if an attempt is made to delete a patch baseline that is registered for a patch group.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteResourceDataSync

Deletes a Resource Data Sync configuration. After the configuration is deleted, changes to inventory data on managed instances are no longer synced with the target Amazon S3 bucket. Deleting a sync configuration does not delete data in the target Amazon S3 bucket.

Request Syntax

```json
{
    "SyncName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**SyncName (p. 51)**

The name of the configuration to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

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. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**ResourceDataSyncNotFoundException**

The specified sync name was not found.

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
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DeregisterManagedInstance

Removes the server or virtual machine from the list of registered servers. You can reregister the instance again at any time. If you don't plan to use Run Command on the server, we suggest uninstalling the SSM Agent first.

Request Syntax

```
{
    "InstanceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

InstanceId (p. 53)

  The ID assigned to the managed instance when you registered it using the activation process.

  Type: String

  Pattern: ^mi-[0-9a-f]{17}$

  Required: Yes

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. 463).

InternalServerError

  An error occurred on the server side.

  HTTP Status Code: 400

InvalidInstanceId

  The following problems can cause this exception:

  You do not have permission to access the instance.

  The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

  The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.
The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeregisterPatchBaselineForPatchGroup

Removes a patch group from a patch baseline.

Request Syntax

```json
{
    "BaselineId": "string",
    "PatchGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 55)**

The ID of the patch baseline to deregister the patch group from.

Type: String


Pattern: `^[\p{L}\p{Z}\p{N}_.:/=+\-@]*\{20,128\}$`

Required: Yes

**PatchGroup (p. 55)**

The name of the patch group that should be deregistered from the patch baseline.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[\p{L}\p{Z}\p{N}_.:/=+\-@]*$`

Required: Yes

Response Syntax

```json
{
    "BaselineId": "string",
    "PatchGroup": "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.
BaselineId (p. 55)

The ID of the patch baseline the patch group was deregistered from.

Type: String


Pattern: ^[a-zA-Z0-9]{20,128}$

PatchGroup (p. 55)

The name of the patch group deregistered from the patch baseline.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([\p{L}\p{Z}\p{N}_:.=+/\-@]*)$
DeregisterTargetFromMaintenanceWindow

Removes a target from a Maintenance Window.

Request Syntax

```
{
    "Safe": boolean,
    "WindowId": "string",
    "WindowTargetId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Safe (p. 57)**

The system checks if the target is being referenced by a task. If the target is being referenced, the system returns an error and does not deregister the target from the Maintenance Window.

Type: Boolean

Required: No

**WindowId (p. 57)**

The ID of the Maintenance Window the target should be removed from.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

**WindowTargetId (p. 57)**

The ID of the target definition to remove.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: Yes

Response Syntax

```
{
    "WindowId": "string",
}
```
"WindowTargetId": "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.

**WindowId (p. 57)**

The ID of the Maintenance Window the target was removed from.

Type: String


Pattern: `^mw-[0-9a-f]{17}$`

**WindowTargetId (p. 57)**

The ID of the removed target definition.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**TargetInUseException**

You specified the Safe option for the DeregisterTargetFromMaintenanceWindow operation, but the target is still referenced in a task.

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
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DeregisterTaskFromMaintenanceWindow

Removes a task from a Maintenance Window.

Request Syntax

```
{
    "WindowId": "string",
    "WindowTaskId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**WindowId (p. 60)**

The ID of the Maintenance Window the task should be removed from.

Type: String


Pattern: `^mw-[0-9a-f]{17}$`

Required: Yes

**WindowTaskId (p. 60)**

The ID of the task to remove from the Maintenance Window.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$`

Required: Yes

Response Syntax

```
{
    "WindowId": "string",
    "WindowTaskId": "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.
WindowId (p. 60)

The ID of the Maintenance Window the task was removed from.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

WindowTaskId (p. 60)

The ID of the task removed from the Maintenance Window.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeActivations

Details about the activation, including: the date and time the activation was created, the expiration date, the IAM role assigned to the instances in the activation, and the number of instances activated by this registration.

Request Syntax

```json
{
    "Filters": [
        {
            "FilterKey": "string",
            "FilterValues": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 62)**

A filter to view information about your activations.

Type: Array of DescribeActivationsFilter (p. 354) objects

Required: No

**MaxResults (p. 62)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 62)**

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

Response Syntax

```json
{
    "ActivationList": [
    ...
```
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.

**ActivationList (p. 62)**

A list of activations for your AWS account.

Type: Array of Activation (p. 312) objects

**NextToken (p. 62)**

The token for the next set of items to return. Use this token to get the next set of results.

Type: String

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerErrorCode**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidFilter**

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
See Also

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

Describes the association for the specified target or instance. If you created the association by using the Targets parameter, then you must retrieve the association by using the association ID. If you created the association by specifying an instance ID and a Systems Manager document, then you retrieve the association by specifying the document name and the instance ID.

Request Syntax

```json
{
    "AssociationId": "string",
    "AssociationVersion": "string",
    "InstanceId": "string",
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

AssociationId (p. 65)

The association ID for which you want information.

Type: String

Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: No

AssociationVersion (p. 65)

Specify the association version to retrieve. To view the latest version, either specify $LATEST for this parameter, or omit this parameter. To view a list of all associations for an instance, use ListInstanceAssociations. To get a list of versions for a specific association, use ListAssociationVersions.

Type: String

Pattern: ([^$]LATEST)|([1-9][0-9]*)

Required: No

InstanceId (p. 65)

The instance ID.

Type: String

Pattern: (^\w{8}|\w{17})|(^mi-\w{17}$)

Required: No

Name (p. 65)

The name of the Systems Manager document.

Type: String
Pattern: ^[a-zA-Z0-9_.\-]{3,128}$

Required: No

**Response Syntax**

```json
{
    "AssociationDescription": {
        "AssociationId": "string",
        "AssociationName": "string",
        "AssociationVersion": "string",
        "Date": number,
        "DocumentVersion": "string",
        "InstanceId": "string",
        "LastExecutionDate": number,
        "LastSuccessfulExecutionDate": number,
        "LastUpdateAssociationDate": number,
        "Name": "string",
        "OutputLocation": {
            "S3Location": {
                "OutputS3BucketName": "string",
                "OutputS3KeyPrefix": "string",
                "OutputS3Region": "string"
            }
        },
        "Overview": {
            "AssociationStatusAggregatedCount": {
                "string": number
            },
            "DetailedStatus": "string",
            "Status": "string"
        },
        "Parameters": {
            "string": [ "string" ]
        },
        "ScheduleExpression": "string",
        "Status": {
            "AdditionalInfo": "string",
            "Date": number,
            "Message": "string",
            "Name": "string"
        },
        "Targets": [ {
            "Key": "string",
            "Values": [ "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.

**AssociationDescription (p. 66)**

Information about the association.
Type: AssociationDescription (p. 316) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

AssociationDoesNotExist

The specified association does not exist.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidAssociationVersion

The version you specified is not valid. Use ListAssociationVersions to view all versions of an association according to the association ID. Or, use the $LATEST parameter to view the latest version of the association.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

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
- AWS SDK for JavaScript
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAutomationExecutions

Provides details about all active and terminated Automation executions.

Request Syntax

```json
{
    "Filters": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

*Filters* (p. 69)

Filters used to limit the scope of executions that are requested.

Type: Array of AutomationExecutionFilter (p. 328) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

*MaxResults* (p. 69)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

*NextToken* (p. 69)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
    "AutomationExecutionMetadataList": [
        {
            "AutomationExecutionId": "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.

**AutomationExecutionMetadataList (p. 69)**

The list of details about each automation execution which has occurred which matches the filter specification, if any.

Type: Array of AutomationExecutionMetadata (p. 329) objects

**NextToken (p. 69)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.
HTTP Status Code: 400

InvalidFilterKey

The specified key is not valid.

HTTP Status Code: 400

InvalidFilterValue

The filter value is not valid. Verify the value and try again.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAutomationStepExecutions

Information about all active and terminated step executions in an Automation workflow.

Request Syntax

```
{
   "AutomationExecutionId": "string",
   "Filters": [
      {
         "Key": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string",
   "ReverseOrder": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AutomationExecutionId (p. 72)**

The Automation execution ID for which you want step execution descriptions.

Type: String

Length Constraints: Fixed length of 36.

Required: Yes

**Filters (p. 72)**

One or more filters to limit the number of step executions returned by the request.

Type: Array of StepExecutionFilter (p. 458) objects

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Required: No

**MaxResults (p. 72)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 72)**

The token for the next set of items to return. (You received this token from a previous call.)
Type: String
Required: No

**ReverseOrder (p. 72)**
A boolean that indicates whether to list step executions in reverse order by start time. The default value is false.

Type: Boolean
Required: No

**Response Syntax**

```
{
    "NextToken": "string",
    "StepExecutions": [
        {
            "Action": "string",
            "ExecutionEndTime": number,
            "ExecutionStartTime": number,
            "FailureDetails": {
                "Details": {
                    "string" : [ "string" ]
                },
                "FailureStage": "string",
                "FailureType": "string"
            },
            "FailureMessage": "string",
            "Inputs": {
                "string" : "string"
            },
            "MaxAttempts": number,
            "OnFailure": "string",
            "Outputs": {
                "string" : [ "string" ]
            },
            "OverriddenParameters": {
                "string" : [ "string" ]
            },
            "Response": "string",
            "ResponseCode": "string",
            "StepExecutionId": "string",
            "StepName": "string",
            "StepStatus": "string",
            "TimeoutSeconds": 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.

**NextToken (p. 73)**
The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.
Type: String

StepExecutions (p. 73)
A list of details about the current state of all steps that make up an execution.
Type: Array of StepExecution (p. 455) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

AutomationExecutionNotFoundException
There is no automation execution information for the requested automation execution ID.
HTTP Status Code: 400

InternalServerError
An error occurred on the server side.
HTTP Status Code: 400

InvalidFilterKey
The specified key is not valid.
HTTP Status Code: 400

InvalidFilterValue
The filter value is not valid. Verify the value and try again.
HTTP Status Code: 400

InvalidNextToken
The specified token is not valid.
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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAvailablePatches

Lists all patches that could possibly be included in a patch baseline.

Request Syntax

```json
{
   "Filters": [
      {
         "Key": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 75)**

Filters used to scope down the returned patches.

Type: Array of PatchOrchestratorFilter (p. 439) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**MaxResults (p. 75)**

The maximum number of patches to return (per page).

Type: Integer

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

Required: No

**NextToken (p. 75)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
   "NextToken": "string",
   "Patches": [
```

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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.

NextToken (p. 75)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Patches (p. 75)

An array of patches. Each entry in the array is a patch structure.

Type: Array of Patch (p. 427) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServer Error

An error occurred on the server side.

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
- AWS SDK for JavaScript

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See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeDocument

Describes the specified Systems Manager document.

Request Syntax

```
{
   "DocumentVersion": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**DocumentVersion (p. 78)**

The document version for which you want information. Can be a specific version or the default version.

Type: String

Pattern: ([$]LATEST|[$]DEFAULT|^\[1-9]\[0-9]*$)

Required: No

**Name (p. 78)**

The name of the Systems Manager document.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.:/]{3,128}$

Required: Yes

Response Syntax

```
{
   "Document": {
      "CreatedDate": number,
      "DefaultVersion": "string",
      "Description": "string",
      "DocumentFormat": "string",
      "DocumentType": "string",
      "DocumentVersion": "string",
      "Hash": "string",
      "HashType": "string",
      "LatestVersion": "string",
      "Name": "string",
      "Owner": "string",
      "Parameters": [
         {
            "DefaultValue": "string",
            "Name": "string",
            "Type": "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.

**Document (p. 78)**

Information about the Systems Manager document.

Type: DocumentDescription (p. 356) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.

HTTP Status Code: 400

**InvalidDocumentVersion**

The document version is not valid or does not exist.

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 Systems Manager API Reference

See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeDocumentPermission

Describes the permissions for a Systems Manager document. If you created the document, you are the owner. If a document is shared, it can either be shared privately (by specifying a user’s AWS account ID) or publicly (All).

Request Syntax

```
{
    "Name": "string",
    "PermissionType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Name (p. 81)

The name of the document for which you are the owner.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: Yes

PermissionType (p. 81)

The permission type for the document. The permission type can be Share.

Type: String

Valid Values: Share

Required: Yes

Response Syntax

```
{
    "AccountIds": [ "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.

AccountIds (p. 81)

The account IDs that have permission to use this document. The ID can be either an AWS account or All.
Type: Array of strings
Array Members: Maximum number of 20 items.
Pattern: (?i)all|\[[0-9]{12}\]

Errors
For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError
An error occurred on the server side.
HTTP Status Code: 400

InvalidDocument
The specified document does not exist.
HTTP Status Code: 400

InvalidPermissionType
The permission type is not supported. Share is the only supported permission type.
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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEffectiveInstanceAssociations

All associations for the instance(s).

**Request Syntax**

```json
{
  "InstanceId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters (p. 461)](https://aws.amazon.com/premiumsupport/knowledge-center/common-parameters/).

The request accepts the following data in JSON format.

**InstanceId (p. 83)**

The instance ID for which you want to view all associations.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-w{17}$)

Required: Yes

**MaxResults (p. 83)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 83)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

**Response Syntax**

```json
{
  "Associations": [
    {
      "AssociationId": "string",
      "AssociationVersion": "string",
      "Content": "string",
      "InstanceId": "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.

**Associations (p. 83)**

The associations for the requested instance.

Type: Array of [InstanceAssociation](https://docs.aws.amazon.com/systems-manager/latest/APIReference/API_InstanceAssociation.html) objects

**NextToken (p. 83)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 463)](https://docs.aws.amazon.com/systems-manager/latest/APIReference/Errors.html).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

HTTP Status Code: 400

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEffectivePatchesForPatchBaseline

Retrieves the current effective patches (the patch and the approval state) for the specified patch baseline. Note that this API applies only to Windows patch baselines.

Request Syntax

```json
{
  "BaselineId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 86)**

The ID of the patch baseline to retrieve the effective patches for.

Type: String


Pattern: ^[a-zA-Z0-9_\-:/]{20,128}$

Required: Yes

**MaxResults (p. 86)**

The maximum number of patches to return (per page).

Type: Integer

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

Required: No

**NextToken (p. 86)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
  "EffectivePatches": [
    {
      "Patch": {
      
```
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.

**EffectivePatches (p. 86)**

An array of patches and patch status.

Type: Array of EffectivePatch (p. 367) objects

**NextToken (p. 86)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerErrorCode**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeInstanceAssociationsStatus

The status of the associations for the instance(s).

Request Syntax

```
{
  "InstanceId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**InstanceId** (p. 89)

The instance IDs for which you want association status information.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: Yes

**MaxResults** (p. 89)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken** (p. 89)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```
{
  "InstanceAssociationStatusInfos": [
    {
      "AssociationId": "string",
      "AssociationName": "string",
      "AssociationVersion": "string",
      "DetailedStatus": "string",
      "DocumentVersion": "string",
    }
  
```
```json
"ErrorCode": "string",
"ExecutionDate": number,
"ExecutionSummary": "string",
"InstanceId": "string",
"Name": "string",
"OutputUrl": {
   "S3OutputUrl": {
      "OutputUrl": "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.

**InstanceAssociationStatusInfos (p. 89)**

Status information about the association.

Type: Array of `InstanceAssociationStatusInfo (p. 374)` objects

**NextToken (p. 89)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see `Common Errors (p. 463)`.

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400
InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeInstanceInformation

Describes one or more of your instances. You can use this to get information about instances like the operating system platform, the SSM Agent version (Linux), status etc. If you specify one or more instance IDs, it returns information for those instances. If you do not specify instance IDs, it returns information for all your instances. If you specify an instance ID that is not valid or an instance that you do not own, you receive an error.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "InstanceInformationFilterList": [
    {
      "key": "string",
      "valueSet": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 92)

One or more filters. Use a filter to return a more specific list of instances.

Type: Array of InstanceInformationStringFilter (p. 381) objects

Array Members: Minimum number of 0 items.

Required: No

InstanceInformationFilterList (p. 92)

One or more filters. Use a filter to return a more specific list of instances.

Type: Array of InstanceInformationFilter (p. 380) objects

Array Members: Minimum number of 0 items.

Required: No

MaxResults (p. 92)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer
Required: No

**NextToken (p. 92)**
The token for the next set of items to return. (You received this token from a previous call.)
Type: String
Required: No

### Response Syntax

```json
{
  "InstanceInformationList": [ 
    {
      "ActivationId": "string",
      "AgentVersion": "string",
      "AssociationOverview": {
        "DetailedStatus": "string",
        "InstanceAssociationStatusAggregatedCount": {
          "string": number
        }
      },
      "AssociationStatus": "string",
      "ComputerName": "string",
      "IamRole": "string",
      "InstanceId": "string",
      "IPAddress": "string",
      "IsLatestVersion": boolean,
      "LastAssociationExecutionDate": number,
      "LastPingDateTime": number,
      "LastSuccessfulAssociationExecutionDate": number,
      "Name": "string",
      "PingStatus": "string",
      "PlatformName": "string",
      "PlatformType": "string",
      "PlatformVersion": "string",
      "RegistrationDate": number,
      "ResourceType": "string"
    },
    {
      "ActivationId": "string",
      "AgentVersion": "string",
      "AssociationOverview": {
        "DetailedStatus": "string",
        "InstanceAssociationStatusAggregatedCount": {
          "string": number
        }
      },
      "AssociationStatus": "string",
      "ComputerName": "string",
      "IamRole": "string",
      "InstanceId": "string",
      "IPAddress": "string",
      "IsLatestVersion": boolean,
      "LastAssociationExecutionDate": number,
      "LastPingDateTime": number,
      "LastSuccessfulAssociationExecutionDate": number,
      "Name": "string",
      "PingStatus": "string",
      "PlatformName": "string",
      "PlatformType": "string",
      "PlatformVersion": "string",
      "RegistrationDate": number,
      "ResourceType": "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.

**InstanceInformationList (p. 93)**
The instance information list.
Type: Array of InstanceInformation (p. 377) objects

**NextToken (p. 93)**
The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidFilterKey**

The specified key is not valid.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidInstanceInformationFilterValue**

The specified filter value is not valid.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3

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See Also

- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeInstancePatches

Retrieves information about the patches on the specified instance and their state relative to the patch baseline being used for the instance.

Request Syntax

```
{
  "Filters": [ 
    { 
      "Key": "string",
      "Values": [ "string" ]
    },
    "InstanceId": "string",
    "MaxResults": number,
    "NextToken": "string"
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 96)**

Each entry in the array is a structure containing:

- **Key** (string, between 1 and 128 characters)
- **Values** (array of strings, each string between 1 and 256 characters)

Type: Array of PatchOrchestratorFilter (p. 439) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**InstanceId (p. 96)**

The ID of the instance whose patch state information should be retrieved.

Type: String

Pattern: `(^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)`

Required: Yes

**MaxResults (p. 96)**

The maximum number of patches to return (per page).

Type: Integer


Required: No
NextToken (p. 96)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```
{
  "NextToken": "string",
  "Patches": [
    {
      "Classification": "string",
      "InstalledTime": number,
      "KBId": "string",
      "Severity": "string",
      "State": "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. 97)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Patches (p. 97)

Each entry in the array is a structure containing:

- Title (string)
- KBId (string)
- Classification (string)
- Severity (string)
- State (string: "INSTALLED", "INSTALLED OTHER", "MISSING", "NOT APPLICABLE", "FAILED")
- InstalledTime (DateTime)
- InstalledBy (string)

Type: Array of PatchComplianceData (p. 431) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).
**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidFilter**

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeInstancePatchStates

Retrieves the high-level patch state of one or more instances.

**Request Syntax**

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

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**InstanceIds (p. 99)**

The ID of the instance whose patch state information should be retrieved.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: Yes

**MaxResults (p. 99)**

The maximum number of instances to return (per page).

Type: Integer


Required: No

**NextToken (p. 99)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

**Response Syntax**

```
{
  "InstancePatchStates": [
    {
      "BaselineId": "string",
      "FailedCount": number,
      "InstalledCount": 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.

**InstancePatchStates (p. 99)**

The high-level patch state for the requested instances.

Type: Array of InstancePatchState (p. 382) objects

**NextToken (p. 99)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DescribeInstancePatchStatesForPatchGroup

Retrieves the high-level patch state for the instances in the specified patch group.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Type": "string",
      "Values": [ "string" ]
    },
    "MaxResults": number,
    "NextToken": "string",
    "PatchGroup": "string"
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 102)**

Each entry in the array is a structure containing:

- **Key** (string between 1 and 200 characters)
- **Values** (array containing a single string)
- **Type** (string "Equal", "NotEqual", "LessThan", "GreaterThan")

Type: Array of `InstancePatchStateFilter (p. 385)` objects

Array Members: Minimum number of 0 items. Maximum number of 4 items.

Required: No

**MaxResults (p. 102)**

The maximum number of patches to return (per page).

Type: Integer


Required: No

**NextToken (p. 102)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No
**PatchGroup (p. 102)**

The name of the patch group for which the patch state information should be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^([\p{L}\p{Z}\p{N}\_\.:=\-@]+)$`

Required: Yes

---

### Response Syntax

```
{
  "InstancePatchStates": [
    {
      "BaselineId": "string",
      "FailedCount": number,
      "InstalledCount": number,
      "InstalledOtherCount": number,
      "InstanceId": "string",
      "MissingCount": number,
      "NotApplicableCount": number,
      "Operation": "string",
      "OperationEndTime": number,
      "OperationStartTime": number,
      "OwnerInformation": "string",
      "PatchGroup": "string",
      "SnapshotId": "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.

**InstancePatchStates (p. 103)**

The high-level patch state for the requested instances.

Type: Array of InstancePatchState (p. 382) objects

Array Members: Minimum number of 1 item. Maximum number of 5 items.

**NextToken (p. 103)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

---

### Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).
**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidFilter**

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindowExecutions

Lists the executions of a Maintenance Window. This includes information about when the Maintenance Window was scheduled to be active, and information about tasks registered and run with the Maintenance Window.

Request Syntax

```
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string",
  "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 105)

Each entry in the array is a structure containing:

- **Key** (string, between 1 and 128 characters)
- **Values** (array of strings, each string is between 1 and 256 characters)

The supported Keys are ExecutedBefore and ExecutedAfter with the value being a date/time string such as 2016-11-04T05:00:00Z.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

MaxResults (p. 105)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 105)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String
Required: No

**WindowId (p. 105)**

The ID of the Maintenance Window whose executions should be retrieved.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

### Response Syntax

```
{
  "NextToken": "string",
  "WindowExecutions": [
    {
      "EndTime": number,
      "StartTime": number,
      "Status": "string",
      "StatusDetails": "string",
      "WindowExecutionId": "string",
      "WindowId": "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. 106)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**WindowExecutions (p. 106)**

Information about the Maintenance Windows execution.

Type: Array of **MaintenanceWindowExecution (p. 397)** objects

### Errors

For information about the errors that are common to all actions, see **Common Errors (p. 463)**.

**InternalServer**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindowExecutionTaskInvocations

Retrieves the individual task executions (one per target) for a particular task executed as part of a Maintenance Window execution.

Request Syntax

```json
{
    "Filters": [  
      {  
        "Key": "string",
        "Values": [ "string" ]
      },  
    ],
    "MaxResults": number,
    "NextToken": "string",
    "TaskId": "string",
    "WindowExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 108)

Optional filters used to scope down the returned task invocations. The supported filter key is STATUS with the corresponding values PENDING, IN_PROGRESS, SUCCESS, FAILED, TIMED_OUT, CANCELLING, and CANCELLED.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

MaxResults (p. 108)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 108)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

TaskId (p. 108)

The ID of the specific task in the Maintenance Window task that should be retrieved.
Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: Yes

WindowExecutionId (p. 108)

The ID of the Maintenance Window execution the task is part of.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: Yes

Response Syntax

```
{
  "NextToken": "string",
  "WindowExecutionTaskInvocationIdentities": [
    {
      "EndTime": number,
      "ExecutionId": "string",
      "InvocationId": "string",
      "OwnerInformation": "string",
      "Parameters": "string",
      "StartTime": number,
      "Status": "string",
      "StatusDetails": "string",
      "TaskExecutionId": "string",
      "TaskType": "string",
      "WindowExecutionId": "string",
      "WindowTargetId": "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. 109)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

WindowExecutionTaskInvocationIdentities (p. 109)

Information about the task invocation results per invocation.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn’t exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindowExecutionTasks

For a given Maintenance Window execution, lists the tasks that were executed.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string",
  "WindowExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 111)

Optional filters used to scope down the returned tasks. The supported filter key is STATUS with the corresponding values PENDING, IN_PROGRESS, SUCCESS, FAILED, TIMED_OUT, CANCELLING, and CANCELLED.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

MaxResults (p. 111)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 111)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

WindowExecutionId (p. 111)

The ID of the Maintenance Window execution whose task executions should be retrieved.
Type: String
Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: Yes

Response Syntax

```json
{
  "NextToken": "string",
  "WindowExecutionTaskIdentities": [
    {
      "EndTime": number,
      "StartTime": number,
      "Status": "string",
      "StatusDetails": "string",
      "TaskArn": "string",
      "TaskExecutionId": "string",
      "TaskType": "string",
      "WindowExecutionId": "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. 112)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

WindowExecutionTaskIdentities (p. 112)

Information about the task executions.

Type: Array of MaintenanceWindowExecutionTaskIdentity (p. 399) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400
InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindows

Retrieves the Maintenance Windows in an AWS account.

**Request Syntax**

```json
{
   "Filters": [ 
      { 
         "Key": "string",
         "Values": [ "string" ]
      },
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 114)**

Optional filters used to narrow down the scope of the returned Maintenance Windows. Supported filter keys are Name and Enabled.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**MaxResults (p. 114)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 114)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

**Response Syntax**

```json
{

```
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. 114)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**WindowIdentities (p. 114)**

Information about the Maintenance Windows.

Type: Array of MaintenanceWindowIdentity (p. 405) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindowTargets

Lists the targets registered with the Maintenance Window.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string",
  "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 117)**

Optional filters that can be used to narrow down the scope of the returned window targets. The supported filter keys are Type, WindowTargetId and OwnerInformation.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**MaxResults (p. 117)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 117)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

**WindowId (p. 117)**

The ID of the Maintenance Window whose targets should be retrieved.

Type: String
Pattern: ^mw-[0-9a-f]{17}$
Required: Yes

Response Syntax

```json
{
  "NextToken": "string",
  "Targets": [
    {
      "Description": "string",
      "Name": "string",
      "OwnerInformation": "string",
      "ResourceType": "string",
      "Targets": [
        {
          "Key": "string",
          "Values": [ "string" ]
        }
      ],
      "WindowId": "string",
      "WindowTargetId": "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. 118)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**Targets (p. 118)**

Information about the targets in the Maintenance Window.

Type: Array of MaintenanceWindowTarget (p. 411) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.
HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeMaintenanceWindowTasks

Lists the tasks in a Maintenance Window.

Request Syntax

```
{
    "Filters": [
      {
        "Key": "string",
        "Values": [ "string" ]
      }
    ],
    "MaxResults": number,
    "NextToken": "string",
    "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 120)

Optional filters used to narrow down the scope of the returned tasks. The supported filter keys are WindowTaskId, TaskArn, Priority, and TaskType.

Type: Array of MaintenanceWindowFilter (p. 404) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

MaxResults (p. 120)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 120)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

WindowId (p. 120)

The ID of the Maintenance Window whose tasks should be retrieved.

Type: String

Pattern: mw-[0-9a-f]{17}$

Required: Yes

Response Syntax

```json
{
    "NextToken": "string",
    "Tasks": [
        {
            "Description": "string",
            "LoggingInfo": {
                "S3BucketName": "string",
                "S3KeyPrefix": "string",
                "S3Region": "string"
            },
            "MaxConcurrency": "string",
            "MaxErrors": "string",
            "Name": "string",
            "Priority": number,
            "ServiceRoleArn": "string",
            "Targets": [
                {
                    "Key": "string",
                    "Values": [ "string" ]
                }
            ],
            "TaskArn": "string",
            "TaskParameters": {
                "string": {
                    "Values": [ "string" ]
                }
            },
            "Type": "string",
            "WindowId": "string",
            "WindowTaskId": "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. 121)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**Tasks (p. 121)**

Information about the tasks in the Maintenance Window.

Type: Array of MaintenanceWindowTask (p. 413) objects
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerErro

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeParameters

Get information about a parameter.

Request results are returned on a best-effort basis. If you specify MaxResults in the request, the response includes information up to the limit specified. The number of items returned, however, can be between zero and the value of MaxResults. If the service reaches an internal limit while processing the results, it stops the operation and returns the matching values up to that point and a NextToken. You can specify the NextToken in a subsequent call to get the next set of results.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string",
  "ParameterFilters": [
    {
      "Key": "string",
      "Option": "string",
      "Values": [ "string" ]
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 123)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of ParametersFilter (p. 425) objects

Required: No

**MaxResults (p. 123)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 123)**

The token for the next set of items to return. (You received this token from a previous call.)
Response Syntax

```json
{
    "NextToken": "string",
    "Parameters": [
        {
            "AllowedPattern": "string",
            "Description": "string",
            "KeyId": "string",
            "LastModifiedDate": number,
            "LastModifiedUser": "string",
            "Name": "string",
            "Type": "string",
            "Version": 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.

**NextToken (p. 124)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**Parameters (p. 124)**

Parameters returned by the request.

Type: Array of ParameterMetadata (p. 423) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400
InvalidFilterKey
The specified key is not valid.
HTTP Status Code: 400

InvalidFilterOption
The specified filter option is not valid. Valid options are Equals and BeginsWith. For Path filter, valid options are Recursive and OneLevel.
HTTP Status Code: 400

InvalidFilterValue
The filter value is not valid. Verify the value and try again.
HTTP Status Code: 400

InvalidNextToken
The specified token is not valid.
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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribePatchBaselines

Lists the patch baselines in your AWS account.

Request Syntax

```json
{
    "Filters": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 126)**

Each element in the array is a structure containing:

- Key: (string, "NAME_PREFIX" or "OWNER")
- Value: (array of strings, exactly 1 entry, between 1 and 255 characters)
- Type: Array of PatchOrchestratorFilter (p. 439) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**MaxResults (p. 126)**

The maximum number of patch baselines to return (per page).

Type: Integer

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

Required: No

**NextToken (p. 126)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
}
```
"BaselineIdentities": [  
  {  
    "BaselineDescription": "string",  
    "BaselineId": "string",  
    "BaselineName": "string",  
    "DefaultBaseline": boolean,  
    "OperatingSystem": "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.

**BaselineIdentities (p. 126)**

An array of PatchBaselineIdentity elements.

Type: Array of PatchBaselineIdentity (p. 429) objects

**NextToken (p. 126)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribePatchGroups

Lists all patch groups that have been registered with patch baselines.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 128)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of PatchOrchestratorFilter (p. 439) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**MaxResults (p. 128)**

The maximum number of patch groups to return (per page).

Type: Integer

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

Required: No

**NextToken (p. 128)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
  "Mappings": [
  {
```

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128
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.

Mappings (p. 128)

Each entry in the array contains:

- PatchGroup: string (between 1 and 256 characters, Regex: ^([\p{L}\p{Z}\p{N}_.:/=+\-@]*)$)
- PatchBaselineIdentity: A PatchBaselineIdentity element.

Type: Array of PatchGroupPatchBaselineMapping (p. 438) objects

NextToken (p. 128)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DescribePatchGroupState

Returns high-level aggregated patch compliance state for a patch group.

Request Syntax

```json
{
  "PatchGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**PatchGroup (p. 131)**

- The name of the patch group whose patch snapshot should be retrieved.
- Type: String
- Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+-@]*)$`
- Required: Yes

Response Syntax

```json
{
  "Instances": number,
  "InstancesWithFailedPatches": number,
  "InstancesWithInstalledOtherPatches": number,
  "InstancesWithInstalledPatches": number,
  "InstancesWithMissingPatches": number,
  "InstancesWithNotApplicablePatches": 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.

**Instances (p. 131)**

- The number of instances in the patch group.
- Type: Integer

**InstancesWithFailedPatches (p. 131)**

- The number of instances with patches from the patch baseline that failed to install.
Type: Integer

**InstancesWithInstalledOtherPatches (p. 131)**

The number of instances with patches installed that aren't defined in the patch baseline.

Type: Integer

**InstancesWithInstalledPatches (p. 131)**

The number of instances with installed patches.

Type: Integer

**InstancesWithMissingPatches (p. 131)**

The number of instances with missing patches from the patch baseline.

Type: Integer

**InstancesWithNotApplicablePatches (p. 131)**

The number of instances with patches that aren't applicable.

Type: Integer

## Errors

For information about the errors that are common to all actions, see [Common Errors (p. 463)](#).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetAutomationExecution

Get detailed information about a particular Automation execution.

Request Syntax

```
{
  "AutomationExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AutomationExecutionId (p. 133)**

The unique identifier for an existing automation execution to examine. The execution ID is returned by StartAutomationExecution when the execution of an Automation document is initiated.

Type: String
Length Constraints: Fixed length of 36.
Required: Yes

Response Syntax

```
{
  "AutomationExecution": {
    "AutomationExecutionId": "string",
    "AutomationExecutionStatus": "string",
    "CurrentAction": "string",
    "CurrentStepName": "string",
    "DocumentName": "string",
    "DocumentVersion": "string",
    "ExecutedBy": "string",
    "ExecutionEndTime": number,
    "ExecutionStartTime": number,
    "FailureMessage": "string",
    "MaxConcurrency": "string",
    "MaxErrors": "string",
    "Mode": "string",
    "Outputs": {
      "string": [ "string" ]
    },
    "Parameters": {
      "string": [ "string" ]
    },
    "ParentAutomationExecutionId": "string",
    "ResolvedTargets": {
      "ParameterValues": [ "string" ],
      "Truncated": boolean
    },
    "StepExecutions": [
      
    ]
  }
}
```
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.

**AutomationExecution (p. 133)**

Detailed information about the current state of an automation execution.

Type: `AutomationExecution (p. 324)` object

Errors

For information about the errors that are common to all actions, see **Common Errors (p. 463).**

**AutomationExecutionNotFoundException**

There is no automation execution information for the requested automation execution ID.
HTTP Status Code: 400

**Internal Server Error**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetCommandInvocation

Returns detailed information about command execution for an invocation or plugin.

Request Syntax

```json
{
   "CommandId": "string",
   "InstanceId": "string",
   "PluginName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**CommandId (p. 136)**

(Required) The parent command ID of the invocation plugin.

Type: String

Length Constraints: Fixed length of 36.

Required: Yes

**InstanceId (p. 136)**

(Required) The ID of the managed instance targeted by the command. A managed instance can be an Amazon EC2 instance or an instance in your hybrid environment that is configured for Systems Manager.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: Yes

**PluginName (p. 136)**

(Optional) The name of the plugin for which you want detailed results. If the document contains only one plugin, the name can be omitted and the details will be returned.

Type: String


Required: No

Response Syntax

```json
{
   "CommandId": "string",
   "Comment": "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.

CommandId (p. 136)

The parent command ID of the invocation plugin.

Type: String

Length Constraints: Fixed length of 36.

Comment (p. 136)

The comment text for the command.

Type: String

Length Constraints: Maximum length of 100.

DocumentName (p. 136)

The name of the document that was executed. For example, AWS-RunShellScript.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

ExecutionElapsedTime (p. 136)

Duration since ExecutionStartDateTime.

Type: String

Pattern: ^([-]?)\d{4}([-]?)\d{2}([-]?)\d{2}([-]?)\d{2}([-]?)\d{2}$

ExecutionEndDateTime (p. 136)

The date and time the plugin was finished executing. Date and time are written in ISO 8601 format. For example, June 7, 2017 is represented as 2017-06-07T00:00:00Z. The following sample AWS CLI command uses the InvokedAfter filter.

aws ssm list-commands --filters key=InvokedAfter,value=2017-06-07T00:00:00Z
If the plugin has not started to execute, the string is empty.

Type: String

Pattern: ^\([\-]\)?\d{4}(?!\d{2}\b)\((-?)((0[1-9]|1[0-9]\d|2\d{2}|3[01]\d|[\w]{17}))((-?)((0[1-9]|1\d{2}|2[0-3]\d|24:\d{2})((-?)([\w]{17})?|([\w]{17}))?)?$(

**ExecutionStartDateTime (p. 136)**

The date and time the plugin started executing. Date and time are written in ISO 8601 format. For example, June 7, 2017 is represented as 2017-06-07. The following sample AWS CLI command uses the `InvokedBefore` filter.

`aws ssm list-commands --filters key=InvokedBefore,value=2017-06-07T00:00:00Z`

If the plugin has not started to execute, the string is empty.

Type: String

Pattern: ^\([\-]\)?\d{4}(?!\d{2}\b)\((-?)((0[1-9]|1\d{2}|2[0-3]\d|24:\d{2})((-?)([\w]{17})?|([\w]{17}))?)?$(

**InstanceId (p. 136)**

The ID of the managed instance targeted by the command. A managed instance can be an Amazon EC2 instance or an instance in your hybrid environment that is configured for Systems Manager.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

**PluginName (p. 136)**

The name of the plugin for which you want detailed results. For example, `aws:RunShellScript` is a plug-in.

Type: String


**ResponseCode (p. 136)**

The error level response code for the plugin script. If the response code is -1, then the command has not started executing on the instance, or it was not received by the instance.

Type: Integer

**StandardErrorContent (p. 136)**

The first 8,000 characters written by the plugin to stderr. If the command has not finished executing, then this string is empty.

Type: String

Length Constraints: Maximum length of 8000.

**StandardErrorUrl (p. 136)**

The URL for the complete text written by the plugin to stderr. If the command has not finished executing, then this string is empty.

Type: String
StandardOutputContent (p. 136)

The first 24,000 characters written by the plugin to stdout. If the command has not finished executing, if ExecutionStatus is neither Succeeded nor Failed, then this string is empty.

Type: String

Length Constraints: Maximum length of 24000.

StandardOutputUrl (p. 136)

The URL for the complete text written by the plugin to stdout in Amazon S3. If an Amazon S3 bucket was not specified, then this string is empty.

Type: String

Status (p. 136)

The status of the parent command for this invocation. This status can be different than StatusDetails.

Type: String

Valid Values: Pending | InProgress | Delayed | Success | Cancelled | TimedOut | Failed | Cancelling

StatusDetails (p. 136)

A detailed status of the command execution for an invocation. StatusDetails includes more information than Status because it includes states resulting from error and concurrency control parameters. StatusDetails can show different results than Status. For more information about these statuses, see Run Command Status. StatusDetails can be one of the following values:

- Pending: The command has not been sent to the instance.
- In Progress: The command has been sent to the instance but has not reached a terminal state.
- Delayed: The system attempted to send the command to the target, but the target was not available. The instance might not be available because of network issues, the instance was stopped, etc. The system will try to deliver the command again.
- Success: The command or plugin was executed successfully. This is a terminal state.
- Delivery Timed Out: The command was not delivered to the instance before the delivery timeout expired. Delivery timeouts do not count against the parent command's MaxErrors limit, but they do contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- Execution Timed Out: The command started to execute on the instance, but the execution was not complete before the timeout expired. Execution timeouts count against the MaxErrors limit of the parent command. This is a terminal state.
- Failed: The command wasn't executed successfully on the instance. For a plugin, this indicates that the result code was not zero. For a command invocation, this indicates that the result code for one or more plugins was not zero. Invocation failures count against the MaxErrors limit of the parent command. This is a terminal state.
- Canceled: The command was terminated before it was completed. This is a terminal state.
- Undeliverable: The command can't be delivered to the instance. The instance might not exist or might not be responding. Undeliverable invocations don't count against the parent command's MaxErrors limit and don't contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- Terminated: The parent command exceeded its MaxErrors limit and subsequent command invocations were canceled by the system. This is a terminal state.

Type: String
Length Constraints: Minimum length of 0. Maximum length of 100.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidCommandId**

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidPluginName**

The plugin name is not valid.

HTTP Status Code: 400

**InvocationDoesNotExist**

The command ID and instance ID you specified did not match any invocations. Verify the command ID adn the instance ID and try again.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
GetDefaultPatchBaseline

Retrieves the default patch baseline. Note that Systems Manager supports creating multiple default patch baselines. For example, you can create a default patch baseline for each operating system.

Request Syntax

```json
{
   "OperatingSystem": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**OperatingSystem (p. 142)**

Returns the default patch baseline for the specified operating system.

- Type: String
- Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX
- Required: No

Response Syntax

```json
{
   "BaselineId": "string",
   "OperatingSystem": "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.

**BaselineId (p. 142)**

The ID of the default patch baseline.

- Type: String
- Pattern: ^[a-zA-Z0-9_\-:/]{20,128}$

**OperatingSystem (p. 142)**

The operating system for the returned patch baseline.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServer**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetDeployablePatchSnapshotForInstance

Retrieves the current snapshot for the patch baseline the instance uses. This API is primarily used by the AWS-RunPatchBaseline Systems Manager document.

Request Syntax

```json
{
    "InstanceId": "string",
    "SnapshotId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**InstanceId (p. 144)**

The ID of the instance for which the appropriate patch snapshot should be retrieved.

Type: String

Pattern: `(^[i-]{8} | [i-]{17}$) | ([^mi-]|[^m{17}$])`

Required: Yes

**SnapshotId (p. 144)**

The user-defined snapshot ID.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-fA-F]{8} - [0-9a-fA-F]{4} - [0-9a-fA-F]{4} - [0-9a-fA-F]{4} - [0-9a-fA-F]{12}$`

Required: Yes

Response Syntax

```json
{
    "InstanceId": "string",
    "Product": "string",
    "SnapshotDownloadUrl": "string",
    "SnapshotId": "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.

**InstanceId (p. 144)**

The ID of the instance.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

**Product (p. 144)**

Returns the specific operating system (for example Windows Server 2012 or Amazon Linux 2015.09) on the instance for the specified patch snapshot.

Type: String

**SnapshotDownloadUrl (p. 144)**

A pre-signed Amazon S3 URL that can be used to download the patch snapshot.

Type: String

**SnapshotId (p. 144)**

The user-defined snapshot ID.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

---

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**UnsupportedOperatingSystem**

The operating systems you specified is not supported, or the operation is not supported for the operating system. Valid operating systems include: Windows, AmazonLinux, RedhatEnterpriseLinux, and Ubuntu.

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
See Also

- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetDocument

Gets the contents of the specified Systems Manager document.

Request Syntax

```
{
   "DocumentFormat": "string",
   "DocumentVersion": "string",
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**DocumentFormat (p. 147)**

Returns the document in the specified format. The document format can be either JSON or YAML. JSON is the default format.

- Type: String
- Valid Values: YAML | JSON
- Required: No

**DocumentVersion (p. 147)**

The document version for which you want information.

- Type: String
- Pattern: ([$]LATEST|[$$]DEFAULT|^([1-9][0-9]*))
- Required: No

**Name (p. 147)**

The name of the Systems Manager document.

- Type: String
- Pattern: ^[a-zA-Z0-9-\_/\.:\(\)](3,128)$
- Required: Yes

Response Syntax

```
{
   "Content": "string",
   "DocumentFormat": "string",
   "DocumentType": "string",
   "DocumentVersion": "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.

**Content** *(p. 147)*

The contents of the Systems Manager document.

Type: String

Length Constraints: Minimum length of 1.

**DocumentFormat** *(p. 147)*

The document format, either JSON or YAML.

Type: String

Valid Values: YAML | JSON

**DocumentType** *(p. 147)*

The document type.

Type: String

Valid Values: Command | Policy | Automation

**DocumentVersion** *(p. 147)*

The document version.

Type: String

Pattern: ([$]LATEST|[#$]DEFAULT|^\[1-9]\[0-9]*$)

**Name** *(p. 147)*

The name of the Systems Manager document.

Type: String

Pattern: ^[a-zA-Z0-9_-/.\]{3,128}$

Errors

For information about the errors that are common to all actions, see Common Errors *(p. 463).*

**InternalServerErro**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.
HTTP Status Code: 400

**InvalidDocumentVersion**

The document version is not valid or does not exist.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetInventory

Query inventory information.

Request Syntax

```
{
   "Aggregators": [
   
   
   ],
   "Filters": [
   
   
   ],
   "MaxResults": number,
   "NextToken": "string",
   "ResultAttributes": [
   
   ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Aggregators (p. 150)**

Returns counts of inventory types based on one or more expressions. For example, if you aggregate by using an expression that uses the AWS:InstanceInformation.PlatformType type, you can see a count of how many Windows and Linux instances exist in your inventoried fleet.

Type: Array of InventoryAggregator (p. 386) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

**Filters (p. 150)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of InventoryFilter (p. 387) objects

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: No
MaxResults (p. 150)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer
Required: No

NextToken (p. 150)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String
Required: No

ResultAttributes (p. 150)

The list of inventory item types to return.

Type: Array of ResultAttribute (p. 450) objects
Array Members: Fixed number of 1 item.
Required: No

Response Syntax

```
{
   "Entities": [
      {
         "Data": {
            "string": {
               "CaptureTime": "string",
               "Content": [
               {
                  "string": "string"
               }
            ],
            "ContentHash": "string",
            "SchemaVersion": "string",
            "TypeName": "string"
         }
      },
      "Id": "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.

Entities (p. 151)

Collection of inventory entities such as a collection of instance inventory.
Type: Array of InventoryResultEntity (p. 392) objects

NextToken (p. 151)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilter

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

HTTP Status Code: 400

InvalidResultAttributeException

The specified inventory item result attribute is not valid.

HTTP Status Code: 400

InvalidTypeNameException

The parameter type name is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetInventorySchema

Return a list of inventory type names for the account, or return a list of attribute names for a specific inventory item type.

Request Syntax

```json
{
   "Aggregator": boolean,
   "MaxResults": number,
   "NextToken": "string",
   "SubType": boolean,
   "TypeName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Aggregator (p. 153)**

Returns inventory schemas that support aggregation. For example, this call returns the AWS:InstanceInformation type, because it supports aggregation based on the PlatformName, PlatformType, and PlatformVersion attributes.

Type: Boolean

Required: No

**MaxResults (p. 153)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 153)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

**SubType (p. 153)**

Returns the sub-type schema for a specified inventory type.

Type: Boolean

Required: No

**TypeName (p. 153)**

The type of inventory item to return.
Response Syntax

```
{
    "NextToken": "string",
    "Schemas": [
        {
            "Attributes": [
                {
                    "DataType": "string",
                    "Name": "string"
                }
            ],
            "DisplayName": "string",
            "TypeName": "string",
            "Version": "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. 154)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Schemas (p. 154)

Inventory schemas returned by the request.

Type: Array of InventoryItemSchema (p. 391) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

HTTP Status Code: 400
InvalidTypeNameException

The parameter type name is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetMaintenanceWindow

Retrieves a Maintenance Window.

Request Syntax

```json
{
  "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

WindowId (p. 156)

- The ID of the desired Maintenance Window.
  - Type: String
  - Pattern: ^mw-[0-9a-f]{17}$
  - Required: Yes

Response Syntax

```json
{
  "AllowUnassociatedTargets": boolean,
  "CreatedDate": number,
  "Cutoff": number,
  "Description": "string",
  "Duration": number,
  "Enabled": boolean,
  "ModifiedDate": number,
  "Name": "string",
  "Schedule": "string",
  "WindowId": "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.

AllowUnassociatedTargets (p. 156)

- Whether targets must be registered with the Maintenance Window before tasks can be defined for those targets.
**Type: Boolean**

**CreatedAt (p. 156)**

The date the Maintenance Window was created.

**Type: Timestamp**

**Cutoff (p. 156)**

The number of hours before the end of the Maintenance Window that Systems Manager stops scheduling new tasks for execution.

**Type: Integer**

**Valid Range:** Minimum value of 0. Maximum value of 23.

**Description (p. 156)**

The description of the Maintenance Window.

**Type: String**

**Length Constraints:** Minimum length of 1. Maximum length of 128.

**Duration (p. 156)**

The duration of the Maintenance Window in hours.

**Type: Integer**

**Valid Range:** Minimum value of 1. Maximum value of 24.

**Enabled (p. 156)**

Whether the Maintenance Windows is enabled.

**Type: Boolean**

**ModifiedDate (p. 156)**

The date the Maintenance Window was last modified.

**Type: Timestamp**

**Name (p. 156)**

The name of the Maintenance Window.

**Type: String**

**Length Constraints:** Minimum length of 3. Maximum length of 128.

**Pattern:** `^[a-zA-Z0-9_\-\.]\{3,128\}`

**Schedule (p. 156)**

The schedule of the Maintenance Window in the form of a cron or rate expression.

**Type: String**

**Length Constraints:** Minimum length of 1. Maximum length of 256.

**WindowId (p. 156)**

The ID of the created Maintenance Window.

**Type: String**
Pattern: ^mw-[0-9a-f]{17}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn’t exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetMaintenanceWindowExecution

Retrieves details about a specific task executed as part of a Maintenance Window execution.

Request Syntax

```
{
   "WindowExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**WindowExecutionId (p. 159)**

The ID of the Maintenance Window execution that includes the task.

Type: String

Length Constraints: Fixed length of 36.

Pattern: \^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: Yes

Response Syntax

```
{
   "EndTime": number,
   "StartTime": number,
   "Status": "string",
   "StatusDetails": "string",
   "TaskIds": [ "string" ],
   "WindowExecutionId": "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.

**EndTime (p. 159)**

The time the Maintenance Window finished executing.

Type: Timestamp

**StartTime (p. 159)**

The time the Maintenance Window started executing.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetMaintenanceWindowExecutionTask

Retrieves the details about a specific task executed as part of a Maintenance Window execution.

Request Syntax

```
{
  "TaskId": "string",
  "WindowExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

TaskId (p. 162)

The ID of the specific task execution in the Maintenance Window task that should be retrieved.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: Yes

WindowExecutionId (p. 162)

The ID of the Maintenance Window execution that includes the task.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: Yes

Response Syntax

```
{
  "EndTime": number,
  "MaxConcurrency": "string",
  "MaxErrors": "string",
  "Priority": number,
  "ServiceRole": "string",
  "StartTime": number,
  "Status": "string",
  "StatusDetails": "string",
  "TaskArn": "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.

**EndTime (p. 162)**
The time the task execution completed.
Type: Timestamp

**MaxConcurrency (p. 162)**
The defined maximum number of task executions that could be run in parallel.
Type: String
Pattern: ^((1-9)(0-9)* | (1-9)(0-9% | (1-9)% | 100%)$

**MaxErrors (p. 162)**
The defined maximum number of task execution errors allowed before scheduling of the task execution would have been stopped.
Type: String
Pattern: ^((1-9)(0-9)* | (0)| (1-9)(0-9% | (0-9)% | 100%)$

**Priority (p. 162)**
The priority of the task.
Type: Integer
Valid Range: Minimum value of 0.

**ServiceRole (p. 162)**
The role that was assumed when executing the task.
Type: String

**StartTime (p. 162)**
The time the task execution started.
Type: Timestamp
Status (p. 162)

The status of the task.

Type: String

Valid Values: PENDING | IN_PROGRESS | SUCCESS | FAILED | TIMED_OUT | CANCELLING | CANCELLED | SKIPPED_OVERLAPPING

StatusDetails (p. 162)

The details explaining the Status. Only available for certain status values.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 250.

TaskArn (p. 162)

The ARN of the executed task.

Type: String


TaskExecutionId (p. 162)

The ID of the specific task execution in the Maintenance Window task that was retrieved.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

TaskParameters (p. 162)

The parameters passed to the task when it was executed. The map has the following format:

Key: string, between 1 and 255 characters

Value: an array of strings, each string is between 1 and 255 characters

Type: Array of string to MaintenanceWindowTaskParameterValueExpression (p. 417) object maps

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Type (p. 162)

The type of task executed.

Type: String

Valid Values: RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA

WindowExecutionId (p. 162)

The ID of the Maintenance Window execution that includes the task.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerException

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetMaintenanceWindowExecutionTaskInvocation

Retrieves a task invocation. A task invocation is a specific task executing on a specific target. Maintenance Windows report status for all invocations.

Request Syntax

```
{
    "InvocationId": "string",
    "TaskId": "string",
    "WindowExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

InvocationId (p. 166)

The invocation ID to retrieve.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{12}$

Required: Yes

TaskId (p. 166)

The ID of the specific task in the Maintenance Window task that should be retrieved.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{12}$

Required: Yes

WindowExecutionId (p. 166)

The ID of the Maintenance Window execution for which the task is a part.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{4}[-][0-9a-fA-F]{12}$

Required: Yes
Response Syntax

```json
{
  "EndTime": number,
  "ExecutionId": "string",
  "InvocationId": "string",
  "OwnerInformation": "string",
  "Parameters": "string",
  "StartTime": number,
  "Status": "string",
  "StatusDetails": "string",
  "TaskExecutionId": "string",
  "TaskType": "string",
  "WindowExecutionId": "string",
  "WindowTargetId": "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.

EndTime (p. 167)

The time that the task finished executing on the target.

Type: Timestamp

ExecutionId (p. 167)

The execution ID.

Type: String

InvocationId (p. 167)

The invocation ID.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

OwnerInformation (p. 167)

User-provided value to be included in any CloudWatch events raised while running tasks for these targets in this Maintenance Window.

Type: String


Parameters (p. 167)

The parameters used at the time that the task executed.

Type: String

StartTime (p. 167)

The time that the task started executing on the target.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.
For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetMaintenanceWindowTask

Lists the tasks in a Maintenance Window.

**Request Syntax**

```json
{
  "WindowId": "string",
  "WindowTaskId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**WindowId (p. 170)**

The Maintenance Window ID that includes the task to retrieve.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

**WindowTaskId (p. 170)**

The Maintenance Window task ID to retrieve.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^\[0-9a-fA-F\]{8}\-[0-9a-fA-F\]{4}\-[0-9a-fA-F\]{4}\-[0-9a-fA-F\]{4}\-[0-9a-fA-F\]{12}$

Required: Yes

**Response Syntax**

```json
{
  "Description": "string",
  "LoggingInfo": {
    "S3BucketName": "string",
    "S3KeyPrefix": "string",
    "S3Region": "string"
  },
  "MaxConcurrency": "string",
  "MaxErrors": "string",
  "Name": "string",
  "Priority": number,
  "ServiceRoleArn": "string",
  "Targets": [
```
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.

**Description (p. 170)**

The retrieved task description.

Type: String

LoggingInfo (p. 170)

The location in Amazon S3 where the task results are logged.

Type: LoggingInfo (p. 395) object

MaxConcurrency (p. 170)

The maximum number of targets allowed to run this task in parallel.

Type: String


Pattern: ^([1-9]\[0-9\]*|[1-9]\[0-9\]%|[1-9]%|100%)$

MaxErrors (p. 170)

The maximum number of errors allowed before the task stops being scheduled.

Type: String


Pattern: ^([1-9]\[0-9\]*|[0]|[1-9]\[0-9\]%|[0-9]%|100%)$

Name (p. 170)

The retrieved task name.

Type: String


Pattern: ^[a-zA-Z0-9_.\-]{3,128}$

Priority (p. 170)

The priority of the task when it executes. The lower the number, the higher the priority. Tasks that have the same priority are scheduled in parallel.

Type: Integer

Valid Range: Minimum value of 0.

ServiceRoleArn (p. 170)

The IAM service role to assume during task execution.

Type: String

Targets (p. 170)

The targets where the task should execute.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

TaskArn (p. 170)

The resource that the task used during execution. For RUN_COMMAND and AUTOMATION task types, the TaskArn is the Systems Manager Document name/ARN. For LAMBDA tasks, the value is the function name/ARN. For STEP_FUNCTION tasks, the value is the state machine ARN.

Type: String

**TaskInvocationParameters (p. 170)**

The parameters to pass to the task when it executes.

Type: MaintenanceWindowTaskInvocationParameters (p. 416) object

**TaskParameters (p. 170)**

The parameters to pass to the task when it executes.

Type: String to MaintenanceWindowTaskParameterValueExpression (p. 417) object map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

**TaskType (p. 170)**

The type of task to execute.

Type: String

Valid Values: RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA

**WindowId (p. 170)**

The retrieved Maintenance Window ID.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

**WindowTaskId (p. 170)**

The retrieved Maintenance Window task ID.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetParameter

Get information about a parameter by using the parameter name.

Request Syntax

```json
{
  "Name": "string",
  "WithDecryption": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Name (p. 175)**

The name of the parameter you want to query.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

**WithDecryption (p. 175)**

Return decrypted values for secure string parameters. This flag is ignored for String and StringList parameter types.

Type: Boolean

Required: No

Response Syntax

```json
{
  "Parameter": {
    "Name": "string",
    "Type": "string",
    "Value": "string",
    "Version": 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.
Parameter (p. 175)

Information about a parameter.

Type: Parameter (p. 420) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidKeyId

The query key ID is not valid.

HTTP Status Code: 400

ParameterNotFound

The parameter could not be found. Verify the name and try again.

HTTP Status Code: 400

ParameterVersionNotFound

The specified parameter version was not found. Verify the parameter name and version, and try again.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetParameterHistory

Query a list of all parameters used by the AWS account.

Request Syntax

```
{
   "MaxResults": number,
   "Name": "string",
   "NextToken": "string",
   "WithDecryption": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

MaxResults (p. 177)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

Name (p. 177)

The name of a parameter you want to query.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

NextToken (p. 177)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

WithDecryption (p. 177)

Return decrypted values for secure string parameters. This flag is ignored for String and StringList parameter types.

Type: Boolean

Required: No
Response Syntax

```json
{
   "NextToken": "string",
   "Parameters": [
      {
         "AllowedPattern": "string",
         "Description": "string",
         "KeyId": "string",
         "LastModifiedDate": number,
         "LastModifiedUser": "string",
         "Name": "string",
         "Type": "string",
         "Value": "string",
         "Version": 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.

**NextToken (p. 178)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

**Parameters (p. 178)**

A list of parameters returned by the request.

Type: Array of ParameterHistory (p. 421) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidKeyId**

The query key ID is not valid.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

HTTP Status Code: 400
ParameterNotFound

The parameter could not be found. Verify the name and try again.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetParameters

Get details of a parameter.

Request Syntax

```json
{
    "Names": [ "string" ],
    "WithDecryption": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Names (p. 180)**

Names of the parameters for which you want to query information.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

**WithDecryption (p. 180)**

Return decrypted secure string value. Return decrypted values for secure string parameters. This flag is ignored for String and StringList parameter types.

Type: Boolean

Required: No

Response Syntax

```json
{
    "InvalidParameters": [ "string" ],
    "Parameters": [
    {
        "Name": "string",
        "Type": "string",
        "Value": "string",
        "Version": 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.

**InvalidParameters (p. 180)**

A list of parameters that are not formatted correctly or do not run when executed.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 2048.

**Parameters (p. 180)**

A list of details for a parameter.

Type: Array of Parameter (p. 420) objects

---

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServer>Error**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidKeyId**

The query key ID is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetParametersByPath

Retrieve parameters in a specific hierarchy. For more information, see Working with Systems Manager Parameters.

Request results are returned on a best-effort basis. If you specify MaxResults in the request, the response includes information up to the limit specified. The number of items returned, however, can be between zero and the value of MaxResults. If the service reaches an internal limit while processing the results, it stops the operation and returns the matching values up to that point and a NextToken. You can specify the NextToken in a subsequent call to get the next set of results.

**Note**
This API action doesn't support filtering by tags.

**Request Syntax**

```json
{
    "MaxResults": number,
    "NextToken": "string",
    "ParameterFilters": [
        {
            "Key": "string",
            "Option": "string",
            "Values": [ "string" ]
        }
    ],
    "Path": "string",
    "Recursive": boolean,
    "WithDecryption": boolean
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**MaxResults (p. 182)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 182)**

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

**ParameterFilters (p. 182)**

Filters to limit the request results.
Type: Array of ParameterStringFilter (p. 426) objects
Required: No

Path (p. 182)
The hierarchy for the parameter. Hierarchies start with a forward slash (/) and end with the parameter name. A hierarchy can have a maximum of 15 levels. Here is an example of a hierarchy: /Finance/Prod/IAD/WinServ2016/license33
Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Required: Yes

Recursive (p. 182)
Retrieve all parameters within a hierarchy.
Type: Boolean
Required: No

WithDecryption (p. 182)
Retrieve all parameters in a hierarchy with their value decrypted.
Type: Boolean
Required: No

Response Syntax

```json
{
  "NextToken": "string",
  "Parameters": [
    {
      "Name": "string",
      "Type": "string",
      "Value": "string",
      "Version": 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.

NextToken (p. 183)
The token for the next set of items to return. Use this token to get the next set of results.
Type: String

Parameters (p. 183)
A list of parameters found in the specified hierarchy.
Type: Array of Parameter objects

Errors

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

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilterKey

The specified key is not valid.

HTTP Status Code: 400

InvalidFilterOption

The specified filter option is not valid. Valid options are Equals and BeginsWith. For Path filter, valid options are Recursive and OneLevel.

HTTP Status Code: 400

InvalidFilterValue

The filter value is not valid. Verify the value and try again.

HTTP Status Code: 400

InvalidKeyId

The query key ID is not valid.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetPatchBaseline

Retrieves information about a patch baseline.

Request Syntax

```json
{
  "BaselineId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 185)**

The ID of the patch baseline to retrieve.

Type: String


Pattern: ^[a-zA-Z0-9_-:/]{20,128}$

Required: Yes

Response Syntax

```json
{
  "ApprovalRules": {
    "PatchRules": [
      {
        "ApproveAfterDays": number,
        "ComplianceLevel": "string",
        "PatchFilterGroup": {
          "PatchFilters": [
            {
              "Key": "string",
              "Values": [ "string" ]
            }
          ]
        }
      }
    ]
  },
  "ApprovedPatches": [ "string" ],
  "ApprovedPatchesComplianceLevel": "string",
  "BaselineId": "string",
  "CreatedDate": number,
  "Description": "string",
  "GlobalFilters": {
    "PatchFilters": [
      {
        "Key": "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.

ApprovalRules (p. 185)
A set of rules used to include patches in the baseline.
Type: PatchRuleGroup (p. 441) object

ApprovedPatches (p. 185)
A list of explicitly approved patches for the baseline.
Type: Array of strings
Array Members: Minimum number of 0 items. Maximum number of 50 items.
Length Constraints: Minimum length of 1. Maximum length of 100.

ApprovedPatchesComplianceLevel (p. 185)
Returns the specified compliance severity level for approved patches in the patch baseline.
Type: String
Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

BaselineId (p. 185)
The ID of the retrieved patch baseline.
Type: String
Pattern: ^[a-zA-Z0-9_\-/:]{20,128}$

CreatedDate (p. 185)
The date the patch baseline was created.
Type: Timestamp

Description (p. 185)
A description of the patch baseline.
Type: String
**GlobalFilters (p. 185)**

A set of global filters used to exclude patches from the baseline.

Type: `PatchFilterGroup (p. 437)` object

**ModifiedDate (p. 185)**

The date the patch baseline was last modified.

Type: `Timestamp`

**Name (p. 185)**

The name of the patch baseline.

Type: `String`


Pattern: `^[a-zA-Z0-9_\-\.]{3,128}$`

**OperatingSystem (p. 185)**

Returns the operating system specified for the patch baseline.

Type: `String`

Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX

**PatchGroups (p. 185)**

Patch groups included in the patch baseline.

Type: `Array of strings`

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[\p{L}\p{Z}\p{N}_./:=+-@]{1,256}$`

**RejectedPatches (p. 185)**

A list of explicitly rejected patches for the baseline.

Type: `Array of strings`

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 100.

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidResourceId

The resource ID is not valid. Verify that you entered the correct ID and try again.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetPatchBaselineForPatchGroup

Retrieves the patch baseline that should be used for the specified patch group.

Request Syntax

```json
{
   "OperatingSystem": "string",
   "PatchGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**OperatingSystem (p. 189)**

Returns the operating system rule specified for patch groups using the patch baseline.

Type: String

Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX

Required: No

**PatchGroup (p. 189)**

The name of the patch group whose patch baseline should be retrieved.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([^p{L}\p{Z}\p{N}_.-/+=@\*]+$)

Required: Yes

Response Syntax

```json
{
   "BaselineId": "string",
   "OperatingSystem": "string",
   "PatchGroup": "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.
BaselineId (p. 189)

The ID of the patch baseline that should be used for the patch group.

Type: String


Pattern: ^[a-zA-Z0-9_\-/]{20,128}$

OperatingSystem (p. 189)

The operating system rule specified for patch groups using the patch baseline.

Type: String

Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT.ENTERPRISE_LINUX

PatchGroup (p. 189)

The name of the patch group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([-\p{L}\p{Z}\p{N}_./:=+/\-_@]*$}

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListAssociations

Lists the associations for the specified Systems Manager document or instance.

Request Syntax

```
{
    "AssociationFilterList": [
        {
            "key": "string",
            "value": "string"
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationFilterList (p. 191)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of AssociationFilter (p. 319) objects

Array Members: Minimum number of 1 item.

Required: No

**MaxResults (p. 191)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 191)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```
{
    "Associations": [
```

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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.

Associations (p. 191)

The associations.

Type: Array of Association (p. 314) objects

NextToken (p. 191)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListAssociationVersions

Retrieves all versions of an association for a specific association ID.

Request Syntax

```json
{
   "AssociationId": "string",
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationId (p. 194)**

The association ID for which you want to view all versions.

- Type: String
- Pattern: `[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}`
- Required: Yes

**MaxResults (p. 194)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

- Type: Integer
- Required: No

**NextToken (p. 194)**

A token to start the list. Use this token to get the next set of results.

- Type: String
- Required: No

Response Syntax

```json
{
   "AssociationVersions": [
      {
         "AssociationId": "string",
         "AssociationName": "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.

**AssociationVersions (p. 194)**

Information about all versions of the association for the specified association ID.

Type: Array of AssociationVersionInfo (p. 322) objects

Array Members: Minimum number of 1 item.

**NextToken (p. 194)**

The token for the next set of items to return. Use this token to get the next set of results.

Type: String

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**AssociationDoesNotExist**

The specified association does not exist.

HTTP Status Code: 400

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400
InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListCommandInvocations

An invocation is a copy of a command sent to a specific instance. A command can apply to one or more instances. A command invocation applies to one instance. For example, if a user executes SendCommand against three instances, then a command invocation is created for each requested instance ID. ListCommandInvocations provide status about command execution.

### Request Syntax

```json
{
    "CommandId": "string",
    "Details": boolean,
    "Filters": [
        {
            "key": "string",
            "value": "string"
        }
    ],
    "InstanceId": "string",
    "MaxResults": number,
    "NextToken": "string"
}
```

### Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**CommandId (p. 197)**

(Optional) The invocations for a specific command ID.

Type: String

Length Constraints: Fixed length of 36.

Required: No

**Details (p. 197)**

(Optional) If set this returns the response of the command executions and any command output. By default this is set to False.

Type: Boolean

Required: No

**Filters (p. 197)**

(Optional) One or more filters. Use a filter to return a more specific list of results.

Type: Array of CommandFilter (p. 337) objects

Array Members: Minimum number of 1 item. Maximum number of 3 items.

Required: No
InstanceId (p. 197)

(Optional) The command execution details for a specific instance ID.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

MaxResults (p. 197)

(Optional) The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 197)

(Optional) The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```
{
    "CommandInvocations": [
        {
            "CommandId": "string",
            "CommandPlugins": [
                {
                    "Name": "string",
                    "Output": "string",
                    "OutputS3BucketName": "string",
                    "OutputS3KeyPrefix": "string",
                    "OutputS3Region": "string",
                    "ResponseCode": number,
                    "ResponseFinishDateTime": number,
                    "ResponseStartDateTime": number,
                    "StandardErrorUrl": "string",
                    "StandardOutputUrl": "string",
                    "Status": "string",
                    "StatusDetails": "string"
                }
            ],
            "Comment": "string",
            "DocumentName": "string",
            "InstanceId": "string",
            "InstanceName": "string",
            "NotificationConfig": {
                "NotificationArn": "string",
                "NotificationEvents": [ "string" ],
                "NotificationType": "string"
            },
            "RequestedDateTime": 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.

CommandInvocations (p. 198)

(Optional) A list of all invocations.

Type: Array of CommandInvocation (p. 338) objects

NextToken (p. 198)

(Optional) The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidCommandId

HTTP Status Code: 400

InvalidFilterKey

The specified key is not valid.

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

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The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListCommands

Lists the commands requested by users of the AWS account.

Request Syntax

```
{
  "CommandId": "string",
  "Filters": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "InstanceId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**CommandId (p. 201)**

(Optional) If provided, lists only the specified command.

Type: String

Length Constraints: Fixed length of 36.

Required: No

**Filters (p. 201)**

(Optional) One or more filters. Use a filter to return a more specific list of results.

Type: Array of CommandFilter (p. 337) objects

Array Members: Minimum number of 1 item. Maximum number of 3 items.

Required: No

**InstanceId (p. 201)**

(Optional) Lists commands issued against this instance ID.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

**MaxResults (p. 201)**

(Optional) The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.
Type: Integer


Required: No

NextToken (p. 201)

(Optional) The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
  "Commands": [
    {
      "CommandId": "string",
      "Comment": "string",
      "CompletedCount": number,
      "DocumentName": "string",
      "ErrorCount": number,
      "ExpiresAfter": number,
      "InstanceIds": [ "string" ],
      "MaxConcurrency": "string",
      "MaxErrors": "string",
      "NotificationConfig": {
        "NotificationArn": "string",
        "NotificationEvents": [ "string" ],
        "NotificationType": "string"
      },
      "OutputS3BucketName": "string",
      "OutputS3KeyPrefix": "string",
      "OutputS3Region": "string",
      "Parameters": {
        "string": [ "string" ]
      },
      "RequestedDateTime": number,
      "ServiceRole": "string",
      "Status": "string",
      "StatusDetails": "string",
      "TargetCount": number,
      "Targets": [
        {
          "Key": "string",
          "Values": [ "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.
Commands (p. 202)
(Optional) The list of commands requested by the user.
Type: Array of Command (p. 333) objects

NextToken (p. 202)
(Optional) The token for the next set of items to return. (You received this token from a previous call.)
Type: String

Errors
For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError
An error occurred on the server side.
HTTP Status Code: 400

InvalidCommandId
HTTP Status Code: 400

InvalidFilterKey
The specified key is not valid.
HTTP Status Code: 400

InvalidInstanceId
The following problems can cause this exception:
You do not have permission to access the instance.
The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.
The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.
The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.
HTTP Status Code: 400

InvalidNextToken
The specified token is not valid.
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
See Also

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

For a specified resource ID, this API action returns a list of compliance statuses for different resource types. Currently, you can only specify one resource ID per call. List results depend on the criteria specified in the filter.

Request Syntax

```
{
   "Filters": [
      {
         "Key": "string",
         "Type": "string",
         "Values": [ "string" ]
      },
   ],
   "MaxResults": number,
   "NextToken": "string",
   "ResourceIds": [ "string" ],
   "ResourceTypes": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 205)

One or more compliance filters. Use a filter to return a more specific list of results.

Type: Array of ComplianceStringFilter (p. 349) objects

Required: No

MaxResults (p. 205)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 205)

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

ResourceIds (p. 205)

The ID for the resources from which to get compliance information. Currently, you can only specify one resource ID.
Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

**ResourceTypes (p. 205)**

The type of resource from which to get compliance information. Currently, the only supported resource type is ManagedInstance.

Type: Array of strings

Array Members: Minimum number of 1 item.


Required: No

### Response Syntax

```
{
  "ComplianceItems": [
    {
      "ComplianceType": "string",
      "Details": {
        "string": "string"
      },
      "ExecutionSummary": {
        "ExecutionId": "string",
        "ExecutionTime": number,
        "ExecutionType": "string"
      },
      "Id": "string",
      "ResourceId": "string",
      "ResourceType": "string",
      "Severity": "string",
      "Status": "string",
      "Title": "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.

**ComplianceItems (p. 206)**

A list of compliance information for the specified resource ID.

Type: Array of ComplianceItem (p. 345) objects

**NextToken (p. 206)**

The token for the next set of items to return. Use this token to get the next set of results.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilter

The filter name is not valid. Verify that you entered the correct name and try again.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

HTTP Status Code: 400

InvalidResourceId

The resource ID is not valid. Verify that you entered the correct ID and try again.

HTTP Status Code: 400

InvalidResourceType

The resource type is not valid. For example, if you are attempting to tag an instance, the instance must be a registered, managed instance.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListComplianceSummaries

Returns a summary count of compliant and non-compliant resources for a compliance type. For example, this call can return State Manager associations, patches, or custom compliance types according to the filter criteria that you specify.

Request Syntax

```json
{
  "Filters": [
    {
      "Key": "string",
      "Type": "string",
      "Values": [ "string" ]
    }
  ],
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**Filters (p. 208)**

One or more compliance or inventory filters. Use a filter to return a more specific list of results.

Type: Array of ComplianceStringFilter (p. 349) objects

Required: No

**MaxResults (p. 208)**

The maximum number of items to return for this call. Currently, you can specify null or 50. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**NextToken (p. 208)**

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

Response Syntax

```json
{
  "ComplianceSummaryItems": [
```

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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.

ComplianceSummaryItems (p. 208)

A list of compliant and non-compliant summary counts based on compliance types. For example, this call returns State Manager associations, patches, or custom compliance types according to the filter criteria that you specified.

Type: Array of ComplianceSummaryItem (p. 350) objects

NextToken (p. 208)

The token for the next set of items to return. Use this token to get the next set of results.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilter

The filter name is not valid. Verify the you entered the correct name and try again.
HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListDocuments

Describes one or more of your Systems Manager documents.

Request Syntax

```
{
   "DocumentFilterList": [
      {
         "key": "string",
         "value": "string"
      }
   ],
   "Filters": [
      {
         "Key": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**DocumentFilterList (p. 211)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of DocumentFilter (p. 359) objects

Array Members: Minimum number of 1 item.

Required: No

**Filters (p. 211)**

One or more filters. Use a filter to return a more specific list of results.

Type: Array of DocumentKeyValuesFilter (p. 362) objects

Array Members: Minimum number of 0 items. Maximum number of 6 items.

Required: No

**MaxResults (p. 211)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No
NextToken (p. 211)

The token for the next set of items to return. (You received this token from a previous call.)

Type: String
Required: No

Response Syntax

```
{
   "DocumentIdentifiers": [
      {
         "DocumentFormat": "string",
         "DocumentType": "string",
         "DocumentVersion": "string",
         "Name": "string",
         "Owner": "string",
         "PlatformTypes": [ "string" ],
         "SchemaVersion": "string",
         "Tags": [
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "TargetType": "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.

DocumentIdentifiers (p. 212)

The names of the Systems Manager documents.

Type: Array of DocumentIdentifier (p. 360) objects

NextToken (p. 212)

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServer Error

An error occurred on the server side.
HTTP Status Code: 400

**InvalidFilterKey**

The specified key is not valid.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListDocumentVersions

List all versions for a document.

Request Syntax

```json
{
   "MaxResults": number,
   "Name": "string",
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**MaxResults (p. 214)**

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

**Name (p. 214)**

The name of the document about which you want version information.

Type: String

Pattern: `^[a-zA-Z0-9_\-\.]\{3,128\}$`

Required: Yes

**NextToken (p. 214)**

The token for the next set of items to return. (You received this token from a previous call.)

Type: String

Required: No

Response Syntax

```json
{
   "DocumentVersions": [
   {
      "CreatedDate": number,
      "DocumentFormat": "string",
      "DocumentVersion": "string",
      "IsDefaultVersion": 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.

**DocumentVersions (p. 214)**

The document versions.

Type: Array of `DocumentVersionInfo (p. 365)` objects

Array Members: Minimum number of 1 item.

**NextToken (p. 214)**

The token to use when requesting the next set of items. If there are no additional items to return, the string is empty.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListInventoryEntries

A list of inventory items returned by the request.

Request Syntax

```
{
  "Filters": [
    {
      "Key": "string",
      "Type": "string",
      "Values": [ "string" ]
    }
  ],
  "InstanceId": "string",
  "MaxResults": number,
  "NextToken": "string",
  "TypeName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 217)

One or more filters. Use a filter to return a more specific list of results.

Type: Array of InventoryFilter (p. 387) objects

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Required: No

InstanceId (p. 217)

The instance ID for which you want inventory information.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: Yes

MaxResults (p. 217)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 217)

The token for the next set of items to return. (You received this token from a previous call.)
Response Syntax

```json
{
   "CaptureTime": "string",
   "Entries": [ {
      "string": "string"
   } ],
   "InstanceId": "string",
   "NextToken": "string",
   "SchemaVersion": "string",
   "TypeName": "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.

CaptureTime (p. 218)

The time that inventory information was collected for the instance(s).

Type: String

Pattern: ^(20)\[0-9\][0-9]-(0[1-9]|1[012])-([12][0-9]|3[01]|0[1-9])(T)(2[0-3]|[0-1]\[0-9])(:[0-5][0-9]):([0-5][0-9])(Z)\$

Entries (p. 218)

A list of inventory items on the instance(s).

Type: Array of string to string maps

Array Members: Minimum number of 0 items. Maximum number of 10000 items.

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

InstanceId (p. 218)

The instance ID targeted by the request to query inventory information.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilter

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.
HTTP Status Code: 400

**InvalidTypeNameException**

The parameter type name is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListResourceComplianceSummaries

Returns a resource-level summary count. The summary includes information about compliant and non-compliant statuses and detailed compliance-item severity counts, according to the filter criteria you specify.

Request Syntax

```json
{
    "Filters": [
        {
            "Key": "string",
            "Type": "string",
            "Values": [ "string" ]
        }
    ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Filters (p. 221)

One or more filters. Use a filter to return a more specific list of results.

Type: Array of ComplianceStringFilter (p. 349) objects

Required: No

MaxResults (p. 221)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 221)

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

Response Syntax

```json
{
    "NextToken": "string",
}
```
"ResourceComplianceSummaryItems": [ 
  { 
    "ComplianceType": "string",
    "CompliantSummary": { 
      "CompliantCount": number,
      "SeveritySummary": { 
        "CriticalCount": number,
        "HighCount": number,
        "InformationalCount": number,
        "LowCount": number,
        "MediumCount": number,
        "UnspecifiedCount": number
      }
    },
    "ExecutionSummary": { 
      "ExecutionId": "string",
      "ExecutionTime": number,
      "ExecutionType": "string"
    },
    "NonCompliantSummary": { 
      "NonCompliantCount": number,
      "SeveritySummary": { 
        "CriticalCount": number,
        "HighCount": number,
        "InformationalCount": number,
        "LowCount": number,
        "MediumCount": number,
        "UnspecifiedCount": number
      }
    },
    "OverallSeverity": "string",
    "ResourceId": "string",
    "ResourceType": "string",
    "Status": "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. 221)**

The token for the next set of items to return. Use this token to get the next set of results.

Type: String

**ResourceComplianceSummaryItems (p. 221)**

A summary count for specified or targeted managed instances. Summary count includes information about compliant and non-compliant State Manager associations, patch status, or custom items according to the filter criteria that you specify.

Type: Array of ResourceComplianceSummaryItem (p. 444) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidFilter

The filter name is not valid. Verify the you entered the correct name and try again.

HTTP Status Code: 400

InvalidNextToken

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ListResourceDataSync

Lists your resource data sync configurations. Includes information about the last time a sync attempted to start, the last sync status, and the last time a sync successfully completed.

The number of sync configurations might be too large to return using a single call to ListResourceDataSync. You can limit the number of sync configurations returned by using the MaxResults parameter. To determine whether there are more sync configurations to list, check the value of NextToken in the output. If there are more sync configurations to list, you can request them by specifying the NextToken returned in the call to the parameter of a subsequent call.

Request Syntax

```json
{
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

MaxResults (p. 224)

The maximum number of items to return for this call. The call also returns a token that you can specify in a subsequent call to get the next set of results.

Type: Integer


Required: No

NextToken (p. 224)

A token to start the list. Use this token to get the next set of results.

Type: String

Required: No

Response Syntax

```json
{
    "NextToken": "string",
    "ResourceDataSyncItems": [
        {
            "LastStatus": "string",
            "LastSuccessfulSyncTime": number,
            "LastSyncTime": number,
            "S3Destination": {
                "AWSKMSKeyARN": "string",
                "BucketName": "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. 224)**

The token for the next set of items to return. Use this token to get the next set of results.

Type: String

**ResourceDataSyncItems (p. 224)**

A list of your current Resource Data Sync configurations and their statuses.

Type: Array of ResourceDataSyncItem (p. 446) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidNextToken**

The specified token is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
See Also

- AWS SDK for Ruby V2
ListTagsForResource

Returns a list of the tags assigned to the specified resource.

Request Syntax

```json
{
   "ResourceId": "string",
   "ResourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

ResourceId (p. 227)

The resource ID for which you want to see a list of tags.

Type: String

Required: Yes

ResourceType (p. 227)

Returns a list of tags for a specific resource type.

Type: String

Valid Values: Document | ManagedInstance | MaintenanceWindow | Parameter | PatchBaseline

Required: Yes

Response Syntax

```json
{
   "TagList": [
      {
         "Key": "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.
TagList (p. 227)
A list of tags.
Type: Array of Tag (p. 459) objects

Errors
For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError
An error occurred on the server side.
HTTP Status Code: 400

InvalidResourceId
The resource ID is not valid. Verify that you entered the correct ID and try again.
HTTP Status Code: 400

InvalidResourceType
The resource type is not valid. For example, if you are attempting to tag an instance, the instance must be a registered, managed instance.
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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ModifyDocumentPermission

Shares a Systems Manager document publicly or privately. If you share a document privately, you must specify the AWS user account IDs for those people who can use the document. If you share a document publicly, you must specify All as the account ID.

Request Syntax

```
{
    "AccountIdsToAdd": [ "string" ],
    "AccountIdsToRemove": [ "string" ],
    "Name": "string",
    "PermissionType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AccountIdsToAdd (p. 229)**

The AWS user accounts that should have access to the document. The account IDs can either be a group of account IDs or All.

Type: Array of strings

Array Members: Maximum number of 20 items.

Pattern: (?i)all|[0-9]{12}

Required: No

**AccountIdsToRemove (p. 229)**

The AWS user accounts that should no longer have access to the document. The AWS user account can either be a group of account IDs or All. This action has a higher priority than AccountIdsToAdd. If you specify an account ID to add and the same ID to remove, the system removes access to the document.

Type: Array of strings

Array Members: Maximum number of 20 items.

Pattern: (?i)all|[0-9]{12}

Required: No

**Name (p. 229)**

The name of the document that you want to share.

Type: String

Pattern: ^[a-zA-Z0-9-\_\.]{3,128}$

Required: Yes
PermissionType (p. 229)

The permission type for the document. The permission type can be Share.

Type: String
Valid Values: Share
Required: Yes

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. 463).

DocumentLimitExceeded

You can have at most 200 active Systems Manager documents.

HTTP Status Code: 400

DocumentPermissionLimit

The document cannot be shared with more AWS user accounts. You can share a document with a maximum of 20 accounts. You can publicly share up to five documents. If you need to increase this limit, contact AWS Support.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidPermissionType

The permission type is not supported. Share is the only supported permission type.

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
See Also

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
PutComplianceItems

Registers a compliance type and other compliance details on a designated resource. This action lets you register custom compliance details with a resource. This call overwrites existing compliance information on the resource, so you must provide a full list of compliance items each time that you send the request.

ComplianceType can be one of the following:

- ExecutionId: The execution ID when the patch, association, or custom compliance item was applied.
- ExecutionType: Specify patch, association, or Custom: string.
- ExecutionTime. The time the patch, association, or custom compliance item was applied to the instance.
- Id: The patch, association, or custom compliance ID.
- Title: A title.
- Status: The status of the compliance item. For example, approved for patches, or Failed for associations.
- Severity: A patch severity. For example, critical.
- DocumentName: A SSM document name. For example, AWS-RunPatchBaseline.
- DocumentVersion: An SSM document version number. For example, 4.
- Classification: A patch classification. For example, security updates.
- PatchBaselineId: A patch baseline ID.
- PatchSeverity: A patch severity. For example, Critical.
- PatchState: A patch state. For example, InstancesWithFailedPatches.
- PatchGroup: The name of a patch group.
- InstalledTime: The time the association, patch, or custom compliance item was applied to the resource. Specify the time by using the following format: yyyy-MM-dd'T'HH:mm:ss'Z'

Request Syntax

```json
{
    "ComplianceType": "string",
    "ExecutionSummary": {
        "ExecutionId": "string",
        "ExecutionTime": number,
        "ExecutionType": "string"
    },
    "ItemContentHash": "string",
    "Items": [
        {
            "Details": {
                "string" : "string"
            },
            "Id": "string",
            "Severity": "string",
            "Status": "string",
            "Title": "string"
        }
    ],
    "ResourceId": "string",
    "ResourceType": "string"
}
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**ComplianceType (p. 232)**

Specify the compliance type. For example, specify Association (for a State Manager association), Patch, or Custom: string.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: [A-Za-z0-9-_\s]+|Custom: [a-zA-Z0-9-_\s]+

Required: Yes

**ExecutionSummary (p. 232)**

A summary of the call execution that includes an execution ID, the type of execution (for example, Command), and the date/time of the execution using a datetime object that is saved in the following format: yyyy-MM-dd'T'HH:mm:ss'Z'.

Type: ComplianceExecutionSummary (p. 344) object

Required: Yes

**ItemContentHash (p. 232)**

MD5 or SHA-256 content hash. The content hash is used to determine if existing information should be overwritten or ignored. If the content hashes match, the request to put compliance information is ignored.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**Items (p. 232)**

Information about the compliance as defined by the resource type. For example, for a patch compliance type, Items includes information about the PatchSeverity, Classification, etc.

Type: Array of ComplianceItemEntry (p. 347) objects

Array Members: Minimum number of 0 items. Maximum number of 10000 items.

Required: Yes

**ResourceId (p. 232)**

Specify an ID for this resource. For a managed instance, this is the instance ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: Yes

**ResourceType (p. 232)**

Specify the type of resource. ManagedInstance is currently the only supported resource type.
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. 463).

ComplianceTypeCountLimitExceededException

You specified too many custom compliance types. You can specify a maximum of 10 different types.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidItemContentException

One or more content items is not valid.

HTTP Status Code: 400

InvalidResourceId

The resource ID is not valid. Verify that you entered the correct ID and try again.

HTTP Status Code: 400

InvalidResourceType

The resource type is not valid. For example, if you are attempting to tag an instance, the instance must be a registered, managed instance.

HTTP Status Code: 400

ItemSizeLimitExceededException

The inventory item size has exceeded the size limit.

HTTP Status Code: 400

TotalSizeLimitExceededException

The size of inventory data has exceeded the total size limit for the resource.

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
See Also

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

Bulk update custom inventory items on one more instance. The request adds an inventory item, if it doesn't already exist, or updates an inventory item, if it does exist.

Request Syntax

```
{
   "InstanceId": "string",
   "Items": [
       {
           "CaptureTime": "string",
           "Content": [
               "string" : "string"
           ],
           "ContentHash": "string",
           "Context": {
               "string" : "string"
           },
           "SchemaVersion": "string",
           "TypeName": "string"
       }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**InstanceId (p. 236)**

One or more instance IDs where you want to add or update inventory items.

Type: String

Pattern: (\^i-(\w{8}|\w{17})|\w{17})|\w{17}$

Required: Yes

**Items (p. 236)**

The inventory items that you want to add or update on instances.

Type: Array of InventoryItem (p. 388) objects

Array Members: Minimum number of 1 item. Maximum number of 30 items.

Required: Yes

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. 463).

CustomSchemaCountLimitExceededException

You have exceeded the limit for custom schemas. Delete one or more custom schemas and try again.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidInstanceId

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

InvalidInventoryItemContextException

You specified invalid keys or values in the Context attribute for InventoryItem. Verify the keys and values, and try again.

HTTP Status Code: 400

InvalidItemContentException

One or more content items is not valid.

HTTP Status Code: 400

InvalidTypeNameException

The parameter type name is not valid.

HTTP Status Code: 400

ItemContentMismatchException

The inventory item has invalid content.

HTTP Status Code: 400

ItemSizeLimitExceededException

The inventory item size has exceeded the size limit.

HTTP Status Code: 400

SubTypeCountLimitExceededException

The sub-type count exceeded the limit for the inventory type.
HTTP Status Code: 400

**TotalSizeLimitExceededException**

The size of inventory data has exceeded the total size limit for the resource.

HTTP Status Code: 400

**UnsupportedInventoryItemContextException**

The `Context` attribute that you specified for the `InventoryItem` is not allowed for this inventory type. You can only use the `Context` attribute with inventory types like `AWS:ComplianceItem`.

HTTP Status Code: 400

**UnsupportedInventorySchemaVersionException**

Inventory item type schema version has to match supported versions in the service. Check output of `GetInventorySchema` to see the available schema version for each type.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
PutParameter

Add one or more parameters to the system.

Request Syntax

```
{
    "AllowedPattern": "string",
    "Description": "string",
    "KeyId": "string",
    "Name": "string",
    "Overwrite": boolean,
    "Type": "string",
    "Value": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AllowedPattern (p. 239)**

A regular expression used to validate the parameter value. For example, for String types with values restricted to numbers, you can specify the following: AllowedPattern=^\d+$

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

**Description (p. 239)**

Information about the parameter that you want to add to the system.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

**KeyId (p. 239)**

The KMS Key ID that you want to use to encrypt a parameter when you choose the SecureString data type. If you don't specify a key ID, the system uses the default key associated with your AWS account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([a-zA-Z0-9\-_]+)$

Required: No
Name (p. 239)

The fully qualified name of the parameter that you want to add to the system. The fully qualified name includes the complete hierarchy of the parameter path and name. For example: /Dev/DBServer/MySQL/db-string13

Note
The maximum length constraint listed below includes capacity for additional system attributes that are not part of the name. The maximum length for the fully qualified parameter name is 1011 characters.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 2048.
Required: Yes

Overwrite (p. 239)

Overwrite an existing parameter. If not specified, will default to “false”.
Type: Boolean
Required: No

Type (p. 239)

The type of parameter that you want to add to the system.
Type: String
Valid Values: String | StringList | SecureString
Required: Yes

Value (p. 239)

The parameter value that you want to add to the system.
Type: String
Required: Yes

Response Syntax

```json
{
   "Version": 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.

Version (p. 240)

The new version number of a parameter. If you edit a parameter value, Parameter Store automatically creates a new version and assigns this new version a unique ID. You can reference
a parameter version ID in API actions or in Systems Manager documents (SSM documents). By default, if you don't specify a specific version, the system returns the latest parameter value when a parameter is called.

Type: Long

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**HierarchyLevelLimitExceededException**

A hierarchy can have a maximum of five levels. For example:

/Finance/Prod/IAD/OS/WinServ2016/license15

For more information, see Working with Systems Manager Parameters.

HTTP Status Code: 400

**HierarchyTypeMismatchException**

Parameter Store does not support changing a parameter type in a hierarchy. For example, you can't change a parameter from a String type to a SecureString type. You must create a new, unique parameter.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidAllowedPatternException**

The request does not meet the regular expression requirement.

HTTP Status Code: 400

**InvalidKeyId**

The query key ID is not valid.

HTTP Status Code: 400

**ParameterAlreadyExists**

The parameter already exists. You can't create duplicate parameters.

HTTP Status Code: 400

**ParameterLimitExceeded**

You have exceeded the number of parameters for this AWS account. Delete one or more parameters and try again.

HTTP Status Code: 400

**ParameterMaxVersionLimitExceeded**

The parameter exceeded the maximum number of allowed versions.

HTTP Status Code: 400
ParameterPatternMismatchException

The parameter name is not valid.

HTTP Status Code: 400

TooManyUpdates

There are concurrent updates for a resource that supports one update at a time.

HTTP Status Code: 400

UnsupportedParameterType

The parameter type is not supported.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterDefaultPatchBaseline

Defines the default patch baseline.

Request Syntax

```json
{
    "BaselineId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 243)**

The ID of the patch baseline that should be the default patch baseline.

Type: String


Pattern: `^[a-zA-Z0-9._\-/:]{20,128}$`

Required: Yes

Response Syntax

```json
{
    "BaselineId": "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.

**BaselineId (p. 243)**

The ID of the default patch baseline.

Type: String


Pattern: `^[a-zA-Z0-9._\-/:]{20,128}$`

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).
**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see **AWS Systems Manager Limits**.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidResourceId**

The resource ID is not valid. Verify that you entered the correct ID and try again.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterPatchBaselineForPatchGroup

Registers a patch baseline for a patch group.

Request Syntax

```
{
    "BaselineId": "string",
    "PatchGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**BaselineId (p. 245)**

The ID of the patch baseline to register the patch group with.

- Type: String
- Pattern: `^[a-zA-Z0-9_\-/:\-/]{20,128}$`
- Required: Yes

**PatchGroup (p. 245)**

The name of the patch group that should be registered with the patch baseline.

- Type: String
- Pattern: `^([\p{L}\p{Z}p{L}\p{N}_.:@=+/\-@])*$`
- Required: Yes

Response Syntax

```
{
    "BaselineId": "string",
    "PatchGroup": "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.
BaselineId (p. 245)

The ID of the patch baseline the patch group was registered with.

Type: String


Pattern: ^[a-zA-Z0-9-\_:\-\{20,128}$

PatchGroup (p. 245)

The name of the patch group registered with the patch baseline.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([^p{L}p{Z}p{N}_\.:/+\-@]*)$
See Also

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

Registers a target with a Maintenance Window.

Request Syntax

{
    "ClientToken": "string",
    "Description": "string",
    "Name": "string",
    "OwnerInformation": "string",
    "ResourceType": "string",
    "Targets": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ],
    "WindowId": "string"
}

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

ClientToken (p. 248)

User-provided idempotency token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

Description (p. 248)

An optional description for the target.

Type: String


Required: No

Name (p. 248)

An optional name for the target.

Type: String


Pattern: ^[a-zA-Z0-9_-\.]{3,128}$

Required: No
OwnerInformation (p. 248)

User-provided value that will be included in any CloudWatch events raised while running tasks for these targets in this Maintenance Window.

Type: String


Required: No

ResourceType (p. 248)

The type of target being registered with the Maintenance Window.

Type: String

Valid Values: INSTANCE

Required: Yes

Targets (p. 248)

The targets (either instances or tags). Instances are specified using Key=instanceids,Values=<instanceid1>,<instanceid2>. Tags are specified using Key=<tagName>,Values=<tag value>.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: Yes

WindowId (p. 248)

The ID of the Maintenance Window the target should be registered with.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

Response Syntax

```
{
   "WindowTargetId": "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.

WindowTargetId (p. 249)

The ID of the target definition in this Maintenance Window.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

**IdempotentParameterMismatch**

Error returned when an idempotent operation is retried and the parameters don't match the original call to the API with the same idempotency token.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**ResourceLimitExceededException**

Error returned when the caller has exceeded the default resource limits. For example, too many Maintenance Windows or Patch baselines have been created.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RegisterTaskWithMaintenanceWindow

Adds a new task to a Maintenance Window.

Request Syntax

```
{
    "ClientToken": "string",
    "Description": "string",
    "LoggingInfo": {
        "S3BucketName": "string",
        "S3KeyPrefix": "string",
        "S3Region": "string"
    },
    "MaxConcurrency": "string",
    "MaxErrors": "string",
    "Name": "string",
    "Priority": number,
    "ServiceRoleArn": "string",
    "Targets": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ],
    "TaskArn": "string",
    "TaskInvocationParameters": {
        "Automation": {
            "DocumentVersion": "string",
            "Parameters": {
                "string": [ "string" ]
            }
        },
        "Lambda": {
            "ClientContext": "string",
            "Payload": blob,
            "Qualifier": "string"
        },
        "RunCommand": {
            "Comment": "string",
            "DocumentHash": "string",
            "DocumentHashType": "string",
            "NotificationConfig": {
                "NotificationArn": "string",
                "NotificationEvents": [ "string" ],
                "NotificationType": "string"
            },
            "OutputS3BucketName": "string",
            "OutputS3KeyPrefix": "string",
            "Parameters": {
                "string": [ "string" ]
            },
            "ServiceRoleArn": "string",
            "TimeoutSeconds": number
        },
        "StepFunctions": {
            "Input": "string",
            "Name": "string"
        }
    },
    "TaskParameters": {
        "string": {
            "Values": [ "string" ]
        }
    }
}
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**ClientToken (p. 251)**

User-provided idempotency token.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

**Description (p. 251)**

An optional description for the task.

Type: String


Required: No

**LoggingInfo (p. 251)**

A structure containing information about an Amazon S3 bucket to write instance-level logs to.

Type: LoggingInfo (p. 395) object

Required: No

**MaxConcurrency (p. 251)**

The maximum number of targets this task can be run for in parallel.

Type: String


Pattern: `^([1-9][0-9]*|[1-9][0-9]%|[1-9]%|100%)$`

Required: Yes

**MaxErrors (p. 251)**

The maximum number of errors allowed before this task stops being scheduled.

Type: String


Pattern: `^([1-9][0-9]*|[0]([1-9][0-9]%|[1-9]%|100%)$`

Required: Yes
Name (p. 251)

An optional name for the task.

Type: String


Pattern: ^[a-zA-Z0-9\-_\.]{3,128}$

Required: No

Priority (p. 251)

The priority of the task in the Maintenance Window, the lower the number the higher the priority. Tasks in a Maintenance Window are scheduled in priority order with tasks that have the same priority scheduled in parallel.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

ServiceRoleArn (p. 251)

The role that should be assumed when executing the task.

Type: String

Required: Yes

Targets (p. 251)

The targets (either instances or tags). Instances are specified using Key=instanceids,Values=<instanceid1>,<instanceid2>. Tags are specified using Key=<tagName>,Values=<tag value>.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: Yes

TaskArn (p. 251)

The ARN of the task to execute

Type: String


Required: Yes

TaskInvocationParameters (p. 251)

The parameters that the task should use during execution. Populate only the fields that match the task type. All other fields should be empty.

Type: MaintenanceWindowTaskInvocationParameters (p. 416) object

Required: No

TaskParameters (p. 251)

The parameters that should be passed to the task when it is executed.
Type: String to `MaintenanceWindowTaskParameterValueExpression (p. 417)` object map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**TaskType (p. 251)**

The type of task being registered.

Type: String

Valid Values: RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA

Required: Yes

**WindowId (p. 251)**

The id of the Maintenance Window the task should be added to.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

**Response Syntax**

```json
{
    "WindowTaskId": "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.

**WindowTaskId (p. 254)**

The id of the task in the Maintenance Window.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

**Errors**

For information about the errors that are common to all actions, see `Common Errors (p. 463)`.

**DoesNotExistException**

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.
For information about resource limits in Systems Manager, see Amazon Web Services Systems Manager Limits.

HTTP Status Code: 400

**FeatureNotAvailableException**

You attempted to register a LAMBDA or STEP_FUNCTION task in a region where the corresponding service is not available.

HTTP Status Code: 400

**IdempotentParameterMismatch**

Error returned when an idempotent operation is retried and the parameters don't match the original call to the API with the same idempotency token.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**ResourceLimitExceededException**

Error returned when the caller has exceeded the default resource limits. For example, too many Maintenance Windows or Patch baselines have been created.

For information about resource limits in Systems Manager, see Amazon Web Services Systems Manager Limits.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RemoveTagsFromResource

Removes all tags from the specified resource.

Request Syntax

```json
{
    "ResourceId": "string",
    "ResourceType": "string",
    "TagKeys": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

ResourceId (p. 256)

The resource ID for which you want to remove tags.

- Type: String
- Required: Yes

ResourceType (p. 256)

The type of resource of which you want to remove a tag.

- Type: String
- Valid Values: Document | ManagedInstance | MaintenanceWindow | Parameter | PatchBaseline
- Required: Yes

TagKeys (p. 256)

Tag keys that you want to remove from the specified resource.

- Type: Array of strings
- Pattern: ^(?!(?!aws:)(?=^[\p{L}p{Z}\p{N}_.:/=+-@]*$).*$)*$*. Required: Yes

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. 463).
InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidResourceId

The resource ID is not valid. Verify that you entered the correct ID and try again.

HTTP Status Code: 400

InvalidResourceType

The resource type is not valid. For example, if you are attempting to tag an instance, the instance must be a registered, managed instance.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SendAutomationSignal

Sends a signal to an Automation execution to change the current behavior or status of the execution.

**Request Syntax**

```json
{
  "AutomationExecutionId": "string",
  "Payload": {
    "string": [ "string" ]
  },
  "SignalType": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

**AutomationExecutionId (p. 258)**

The unique identifier for an existing Automation execution that you want to send the signal to.

- **Type:** String
- **Length Constraints:** Fixed length of 36.
- **Required:** Yes

**Payload (p. 258)**

The data sent with the signal. The data schema depends on the type of signal used in the request.

- **Type:** String to array of strings map
- **Key Length Constraints:** Minimum length of 1. Maximum length of 30.
- **Array Members:** Minimum number of 0 items. Maximum number of 10 items.
- **Length Constraints:** Minimum length of 1. Maximum length of 512.
- **Required:** No

**SignalType (p. 258)**

The type of signal. Valid signal types include the following: Approve and Reject.

- **Type:** String
- **Valid Values:** Approve | Reject | StartStep | StopStep | Resume
- **Required:** Yes

**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. 463).

AutomationExecutionNotFoundException

There is no automation execution information for the requested automation execution ID.

HTTP Status Code: 400

AutomationStepNotFoundException

The specified step name and execution ID don't exist. Verify the information and try again.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidAutomationSignalException

The signal is not valid for the current Automation execution.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
SendCommand

Executes commands on one or more managed instances.

Request Syntax

```
{
    "Comment": "string",
    "DocumentHash": "string",
    "DocumentHashType": "string",
    "DocumentName": "string",
    "InstanceIds": [ "string" ],
    "MaxConcurrency": "string",
    "MaxErrors": "string",
    "NotificationConfig": {
        "NotificationArn": "string",
        "NotificationEvents": [ "string" ],
        "NotificationType": "string"
    },
    "OutputS3BucketName": "string",
    "OutputS3KeyPrefix": "string",
    "OutputS3Region": "string",
    "Parameters": {
        "string": [ "string" ]
    },
    "ServiceRoleArn": "string",
    "Targets": [
        {
            "Key": "string",
            "Values": [ "string" ]
        }
    ],
    "TimeoutSeconds": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Comment (p. 260)

User-specified information about the command, such as a brief description of what the command should do.

Type: String

Length Constraints: Maximum length of 100.

Required: No

DocumentHash (p. 260)

The Sha256 or Sha1 hash created by the system when the document was created.

Note

Sha1 hashes have been deprecated.

Type: String
Request Parameters

Length Constraints: Maximum length of 256.

Required: No

**DocumentHashType (p. 260)**

Sha256 or Sha1.

*Note*

Sha1 hashes have been deprecated.

Type: String

Valid Values: Sha256 | Sha1

Required: No

**DocumentName (p. 260)**

Required. The name of the Systems Manager document to execute. This can be a public document or a custom document.

Type: String

Pattern: a-zA-Z0-9_-.:/\]{3,128}$

Required: Yes

**InstanceIds (p. 260)**

The instance IDs where the command should execute. You can specify a maximum of 50 IDs. If you prefer not to list individual instance IDs, you can instead send commands to a fleet of instances using the Targets parameter, which accepts EC2 tags. For more information about how to use Targets, see Sending Commands to a Fleet.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Pattern: (i-\w{8}\s|\w{17})|^mi-\w{17}$

Required: No

**MaxConcurrency (p. 260)**

(Optional) The maximum number of instances that are allowed to execute the command at the same time. You can specify a number such as 10 or a percentage such as 10%. The default value is 50. For more information about how to use MaxConcurrency, see Using Concurrency Controls.

Type: String


Pattern: ^([1-9]\d*|\d%|100%)$|([1-9]\d*|\d%|100%)$%$%

Required: No

**MaxErrors (p. 260)**

The maximum number of errors allowed without the command failing. When the command fails one more time beyond the value of MaxErrors, the systems stops sending the command to additional targets. You can specify a number like 10 or a percentage like 10%. The default value is 50. For more information about how to use MaxErrors, see Using Error Controls.

Type: String

Request Parameters

Pattern: ^([1-9][0-9]*) | [0] | [1-9] [0-9]% | [0-9]% | 100%)$

Required: No

NotificationConfig (p. 260)

Configurations for sending notifications.

Type: NotificationConfig (p. 419) object

Required: No

OutputS3BucketName (p. 260)

The name of the S3 bucket where command execution responses should be stored.

Type: String


Required: No

OutputS3KeyPrefix (p. 260)

The directory structure within the S3 bucket where the responses should be stored.

Type: String

Length Constraints: Maximum length of 500.

Required: No

OutputS3Region (p. 260)

(Deprecated) You can no longer specify this parameter. The system ignores it. Instead, Systems Manager automatically determines the Amazon S3 bucket region.

Type: String


Required: No

Parameters (p. 260)

The required and optional parameters specified in the document being executed.

Type: String to array of strings map

Required: No

ServiceRoleArn (p. 260)

The IAM role that Systems Manager uses to send notifications.

Type: String

Required: No

Targets (p. 260)

(Optional) An array of search criteria that targets instances using a Key,Value combination that you specify. Targets is required if you don't provide one or more instance IDs in the call. For more information about how to use Targets, see Sending Commands to a Fleet.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No

**TimeoutSeconds (p. 260)**

If this time is reached and the command has not already started executing, it will not execute.

Type: Integer


Required: No

---

**Response Syntax**

```
{
  "Command": {
    "CommandId": "string",
    "Comment": "string",
    "CompletedCount": number,
    "DocumentName": "string",
    "ErrorCount": number,
    "ExpiresAfter": number,
    "InstanceIds": [ "string" ],
    "MaxConcurrency": "string",
    "MaxErrors": "string",
    "NotificationConfig": {
      "NotificationArn": "string",
      "NotificationEvents": [ "string" ],
      "NotificationType": "string"
    },
    "OutputS3BucketName": "string",
    "OutputS3KeyPrefix": "string",
    "OutputS3Region": "string",
    "Parameters": {
      "string": [ "string" ]
    },
    "RequestedDateTime": number,
    "ServiceRole": "string",
    "Status": "string",
    "StatusDetails": "string",
    "TargetCount": number,
    "Targets": [
      {
        "Key": "string",
        "Values": [ "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.

**Command (p. 263)**

The request as it was received by Systems Manager. Also provides the command ID which can be used future references to this request.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

**DuplicateInstanceId**

You cannot specify an instance ID in more than one association.

HTTP Status Code: 400

**InternalServer**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**InvalidNotificationConfig**

One or more configuration items is not valid. Verify that a valid Amazon Resource Name (ARN) was provided for an Amazon SNS topic.

HTTP Status Code: 400

**InvalidOutputFolder**

The S3 bucket does not exist.

HTTP Status Code: 400

**InvalidParameters**

You must specify values for all required parameters in the Systems Manager document. You can only supply values to parameters defined in the Systems Manager document.

HTTP Status Code: 400

**InvalidRole**

The role name can't contain invalid characters. Also verify that you specified an IAM role for notifications that includes the required trust policy. For information about configuring the IAM role...
for Run Command notifications, see Configuring Amazon SNS Notifications for Run Command in the AWS Systems Manager User Guide.

HTTP Status Code: 400

**MaxDocumentSizeExceeded**

The size limit of a document is 64 KB.

HTTP Status Code: 400

**UnsupportedPlatformType**

The document does not support the platform type of the given instance ID(s). For example, you sent an document for a Windows instance to a Linux instance.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StartAutomationExecution

Initiates execution of an Automation document.

**Request Syntax**

```json
{
  "ClientToken": "string",
  "DocumentName": "string",
  "DocumentVersion": "string",
  "MaxConcurrency": "string",
  "MaxErrors": "string",
  "Mode": "string",
  "Parameters": {
    "string": [ "string" ]
  },
  "TargetParameterName": "string",
  "Targets": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ]
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters (p. 461)](https://aws.amazon.com/documentation/).

The request accepts the following data in JSON format.

**ClientToken (p. 266)**

User-provided idempotency token. The token must be unique, is case insensitive, enforces the UUID format, and can't be reused.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-zA-F0-9]{8}-[a-zA-F0-9]{4}-[a-zA-F0-9]{4}-[a-zA-F0-9]{4}-[a-zA-F0-9]{12}`

Required: No

**DocumentName (p. 266)**

The name of the Automation document to use for this execution.

Type: String

Pattern: `^[a-zA-Z0-9_\-/.]{3,128}$`

Required: Yes

**DocumentVersion (p. 266)**

The version of the Automation document to use for this execution.
MaxConcurrency (p. 266)

The maximum number of targets allowed to run this task in parallel. You can specify a number, such as 10, or a percentage, such as 10%. The default value is 10.

Type: String


Pattern: (^\[0-9]*|\[1-9]\[0-9]\%|\[0-9]\%|100\%)$

Required: No

MaxErrors (p. 266)

The number of errors that are allowed before the system stops running the automation on additional targets. You can specify either an absolute number of errors, for example 10, or a percentage of the target set, for example 10%. If you specify 3, for example, the system stops running the automation when the fourth error is received. If you specify 0, then the system stops running the automation on additional targets after the first error result is returned. If you run an automation on 50 resources and set max-errors to 10%, then the system stops running the automation on additional targets when the sixth error is received.

Executions that are already running an automation when max-errors is reached are allowed to complete, but some of these executions may fail as well. If you need to ensure that there won’t be more than max-errors failed executions, set max-concurrency to 1 so the executions proceed one at a time.

Type: String


Pattern: ^([1-9][0-9]*|[0]|\[1-9]\[0-9\]%|\[0-9\]%|100\%)$

Required: No

Mode (p. 266)

The execution mode of the automation. Valid modes include the following: Auto and Interactive. The default mode is Auto.

Type: String

Valid Values: Auto | Interactive

Required: No

Parameters (p. 266)

A key-value map of execution parameters, which match the declared parameters in the Automation document.

Type: String to array of strings map


Array Members: Minimum number of 0 items. Maximum number of 10 items.

Required: No

**TargetParameterName (p. 266)**

The name of the parameter used as the target resource for the rate-controlled execution. Required if you specify Targets.

Type: String


Required: No

**Targets (p. 266)**

A key-value mapping to target resources. Required if you specify TargetParameterName.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**Response Syntax**

```json
{
    "AutomationExecutionId": "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.

**AutomationExecutionId (p. 268)**

The unique ID of a newly scheduled automation execution.

Type: String

Length Constraints: Fixed length of 36.

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 463)](#).

**AutomationDefinitionNotFoundException**

An Automation document with the specified name could not be found.

HTTP Status Code: 400

**AutomationDefinitionVersionNotFoundException**

An Automation document with the specified name and version could not be found.
HTTP Status Code: 400
**AutomationExecutionLimitExceeded**

The number of simultaneously running Automation executions exceeded the allowable limit.

HTTP Status Code: 400
**IdempotentParameterMismatch**

Error returned when an idempotent operation is retried and the parameters don't match the original call to the API with the same idempotency token.

HTTP Status Code: 400
**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400
**InvalidAutomationExecutionParametersException**

The supplied parameters for invoking the specified Automation document are incorrect. For example, they may not match the set of parameters permitted for the specified Automation document.

HTTP Status Code: 400
**InvalidTarget**

The target is not valid or does not exist. It might not be configured for EC2 Systems Manager or you might not have permission to perform the operation.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StopAutomationExecution

Stop an Automation that is currently executing.

Request Syntax

```
{
   "AutomationExecutionId": "string",
   "Type": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AutomationExecutionId (p. 270)**

The execution ID of the Automation to stop.

Type: String

Length Constraints: Fixed length of 36.

Required: Yes

**Type (p. 270)**

The stop request type. Valid types include the following: Cancel and Complete. The default type is Cancel.

Type: String

Valid Values: Complete | Cancel

Required: No

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. 463).

**AutomationExecutionNotFoundException**

There is no automation execution information for the requested automation execution ID.

HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.
HTTP Status Code: 400

**InvalidAutomationStatusUpdateException**

The specified update status operation is not valid.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateAssociation

Updates an association. You can update the association name and version, the document version, schedule, parameters, and Amazon S3 output.

Request Syntax

```
{
  "AssociationId": "string",
  "AssociationName": "string",
  "AssociationVersion": "string",
  "DocumentVersion": "string",
  "Name": "string",
  "OutputLocation": {
    "S3Location": {
      "OutputS3BucketName": "string",
      "OutputS3KeyPrefix": "string",
      "OutputS3Region": "string"
    }
  },
  "Parameters": {
    "string": [ "string" ]
  },
  "ScheduleExpression": "string",
  "Targets": [
    {
      "Key": "string",
      "Values": [ "string" ]
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationId (p. 272)**

The ID of the association you want to update.

Type: String

Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: Yes

**AssociationName (p. 272)**

The name of the association that you want to update.

Type: String

Pattern: ^[a-zA-Z0-9\-\_\.]{3,128}$

Required: No
**AssociationVersion (p. 272)**

This parameter is provided for concurrency control purposes. You must specify the latest association version in the service. If you want to ensure that this request succeeds, either specify `$LATEST`, or omit this parameter.

Type: String

Pattern: `([$]LATEST)|([1-9][0-9]*)`

Required: No

**DocumentVersion (p. 272)**

The document version you want update for the association.

Type: String

Pattern: `([$]LATEST|[$]DEFAULT|^[1-9][0-9]*$)`

Required: No

**Name (p. 272)**

The name of the association document.

Type: String

Pattern: `^[a-zA-Z0-9_\-\.]{3,128}$`

Required: No

**OutputLocation (p. 272)**

An Amazon S3 bucket where you want to store the results of this request.

Type: `InstanceAssociationOutputLocation (p. 372)` object

Required: No

**Parameters (p. 272)**

The parameters you want to update for the association. If you create a parameter using Parameter Store, you can reference the parameter using `{ssm:parameter-name}`

Type: String to array of strings map

Required: No

**ScheduleExpression (p. 272)**

The cron expression used to schedule the association that you want to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**Targets (p. 272)**

The targets of the association.

Type: Array of `Target (p. 460)` objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No

Response Syntax

```json
{
  "AssociationDescription": {
    "AssociationId": "string",
    "AssociationName": "string",
    "AssociationVersion": "string",
    "Date": number,
    "DocumentVersion": "string",
    "InstanceId": "string",
    "LastExecutionDate": number,
    "LastSuccessfulExecutionDate": number,
    "LastUpdateAssociationDate": number,
    "Name": "string",
    "OutputLocation": {
      "S3Location": {
        "OutputS3BucketName": "string",
        "OutputS3KeyPrefix": "string",
        "OutputS3Region": "string"
      }
    },
    "Overview": {
      "AssociationStatusAggregatedCount": {
        "string": number
      },
      "DetailedStatus": "string",
      "Status": "string"
    },
    "Parameters": {
      "string": [ "string" ]
    },
    "ScheduleExpression": "string",
    "Status": {
      "AdditionalInfo": "string",
      "Date": number,
      "Message": "string",
      "Name": "string"
    },
    "Targets": [
      {
        "Key": "string",
        "Values": [ "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.

**AssociationDescription (p. 274)**

The description of the association that was updated.

Type: [AssociationDescription (p. 316)](#) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

AssociationDoesNotExist

The specified association does not exist.

HTTP Status Code: 400

AssociationVersionLimitExceeded

You have reached the maximum number versions allowed for an association. Each association has a limit of 1,000 versions.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidAssociationVersion

The version you specified is not valid. Use ListAssociationVersions to view all versions of an association according to the association ID. Or, use the $LATEST parameter to view the latest version of the association.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidDocumentVersion

The document version is not valid or does not exist.

HTTP Status Code: 400

InvalidOutputLocation

The output location is not valid or does not exist.

HTTP Status Code: 400

InvalidParameters

You must specify values for all required parameters in the Systems Manager document. You can only supply values to parameters defined in the Systems Manager document.

HTTP Status Code: 400

InvalidSchedule

The schedule is invalid. Verify your cron or rate expression and try again.

HTTP Status Code: 400

InvalidTarget

The target is not valid or does not exist. It might not be configured for EC2 Systems Manager or you might not have permission to perform the operation.
HTTP Status Code: 400

InvalidUpdate

The update is not valid.

HTTP Status Code: 400

TooManyUpdates

There are concurrent updates for a resource that supports one update at a time.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateAssociationStatus

Updates the status of the Systems Manager document associated with the specified instance.

Request Syntax

```json
{
    "AssociationStatus": {
        "AdditionalInfo": "string",
        "Date": number,
        "Message": "string",
        "Name": "string"
    },
    "InstanceId": "string",
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**AssociationStatus (p. 277)**

The association status.

Type: AssociationStatus (p. 321) object

Required: Yes

**InstanceId (p. 277)**

The ID of the instance.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: Yes

**Name (p. 277)**

The name of the Systems Manager document.

Type: String

Pattern: ^[a-zA-Z0-9_-\.]{3,128}$

Required: Yes

Response Syntax

```json
{
    "AssociationDescription": {
        "AssociationId": "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.

**AssociationDescription (p. 277)**

Information about the association.

Type: AssociationDescription (p. 316) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 463).

**AssociationDoesNotExist**

The specified association does not exist.
HTTP Status Code: 400

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidDocument**

The specified document does not exist.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

You do not have permission to access the instance.

The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

HTTP Status Code: 400

**StatusUnchanged**

The updated status is the same as the current status.

HTTP Status Code: 400

**TooManyUpdates**

There are concurrent updates for a resource that supports one update at a time.

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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)
UpdateDocument

The document you want to update.

Request Syntax

```
{
  "Content": "string",
  "DocumentFormat": "string",
  "DocumentVersion": "string",
  "Name": "string",
  "TargetType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Content (p. 280)

The content in a document that you want to update.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

DocumentFormat (p. 280)

Specify the document format for the new document version. Systems Manager supports JSON and YAML documents. JSON is the default format.

Type: String

Valid Values: YAML | JSON

Required: No

DocumentVersion (p. 280)

The version of the document that you want to update.

Type: String

Pattern: ([#$]LATEST|[#]DEFAULT|^\[1-9]\[0-9]*)$

Required: No

Name (p. 280)

The name of the document that you want to update.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]\{3,128\}$

Required: Yes
**TargetType (p. 280)**

Specify a new target type for the document.

Type: String

Length Constraints: Maximum length of 200.

Pattern: `^\/[\w\.-/:]*$`

Required: No

### Response Syntax

```
{
  "DocumentDescription": {
    "CreateDate": number,
    "DefaultVersion": "string",
    "Description": "string",
    "DocumentFormat": "string",
    "DocumentType": "string",
    "DocumentVersion": "string",
    "Hash": "string",
    "HashType": "string",
    "LatestVersion": "string",
    "Name": "string",
    "Owner": "string",
    "Parameters": [
      {
        "DefaultValue": "string",
        "Description": "string",
        "Name": "string",
        "Type": "string"
      }
    ],
    "PlatformTypes": [ "string" ],
    "SchemaVersion": "string",
    "Sha1": "string",
    "Status": "string",
    "Tags": [
      {
        "Key": "string",
        "Value": "string"
      }
    ],
    "TargetType": "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.

**DocumentDescription (p. 281)**

A description of the document that was updated.

Type: `DocumentDescription (p. 356)` object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DocumentVersionLimitExceeded

The document has too many versions. Delete one or more document versions and try again.

HTTP Status Code: 400

DuplicateDocumentContent

The content of the association document matches another document. Change the content of the document and try again.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidDocumentContent

The content for the document is not valid.

HTTP Status Code: 400

InvalidDocumentSchemaVersion

The version of the document schema is not supported.

HTTP Status Code: 400

InvalidDocumentVersion

The document version is not valid or does not exist.

HTTP Status Code: 400

MaxDocumentSizeExceeded

The size limit of a document is 64 KB.

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
See Also

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateDocumentDefaultVersion

Set the default version of a document.

**Request Syntax**

```json
{
   "DocumentVersion": "string",
   "Name": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

- **DocumentVersion** (p. 284)
  
  The version of a custom document that you want to set as the default version.
  
  Type: String
  
  Pattern: `^[1-9][0-9]*$`
  
  Required: Yes

- **Name** (p. 284)
  
  The name of a custom document that you want to set as the default version.
  
  Type: String
  
  Pattern: `^[a-zA-Z0-9\-._]{3,128}$`
  
  Required: Yes

**Response Syntax**

```json
{
   "Description": {
      "DefaultVersion": "string",
      "Name": "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.

- **Description** (p. 284)
  
  The description of a custom document that you want to set as the default version.
Type: DocumentDefaultVersionDescription (p. 355) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

InvalidDocument

The specified document does not exist.

HTTP Status Code: 400

InvalidDocumentSchemaVersion

The version of the document schema is not supported.

HTTP Status Code: 400

InvalidDocumentVersion

The document version is not valid or does not exist.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateMaintenanceWindow

Updates an existing Maintenance Window. Only specified parameters are modified.

Request Syntax

```
{
   "AllowUnassociatedTargets": boolean,
   "Cutoff": number,
   "Description": "string",
   "Duration": number,
   "Enabled": boolean,
   "Name": "string",
   "Replace": boolean,
   "Schedule": "string",
   "WindowId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

AllowUnassociatedTargets (p. 286)

Whether targets must be registered with the Maintenance Window before tasks can be defined for those targets.

Type: Boolean

Required: No

Cutoff (p. 286)

The number of hours before the end of the Maintenance Window that Systems Manager stops scheduling new tasks for execution.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 23.

Required: No

Description (p. 286)

An optional description for the update request.

Type: String


Required: No

Duration (p. 286)

The duration of the Maintenance Window in hours.

Type: Integer

Required: No

**Enabled (p. 286)**

Whether the Maintenance Window is enabled.

Type: Boolean

Required: No

**Name (p. 286)**

The name of the Maintenance Window.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

**Replace (p. 286)**

If True, then all fields that are required by the CreateMaintenanceWindow action are also required for this API request. Optional fields that are not specified are set to null.

Type: Boolean

Required: No

**Schedule (p. 286)**

The schedule of the Maintenance Window in the form of a cron or rate expression.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**WindowId (p. 286)**

The ID of the Maintenance Window to update.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

**Response Syntax**

```
{
    "AllowUnassociatedTargets": boolean,
    "Cutoff": number,
    "Description": "string",
    "Duration": number,
    "Enabled": boolean,
    "Name": "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.

AllowUnassociatedTargets (p. 287)

Whether targets must be registered with the Maintenance Window before tasks can be defined for those targets.

Type: Boolean

Cutoff (p. 287)

The number of hours before the end of the Maintenance Window that Systems Manager stops scheduling new tasks for execution.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 23.

Description (p. 287)

An optional description of the update.

Type: String


Duration (p. 287)

The duration of the Maintenance Window in hours.

Type: Integer


Enabled (p. 287)

Whether the Maintenance Window is enabled.

Type: Boolean

Name (p. 287)

The name of the Maintenance Window.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Schedule (p. 287)

The schedule of the Maintenance Window in the form of a cron or rate expression.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.
WindowId (p. 287)

The ID of the created Maintenance Window.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateMaintenanceWindowTarget

Modifies the target of an existing Maintenance Window. You can't change the target type, but you can change the following:

The target from being an ID target to a Tag target, or a Tag target to an ID target.
IDs for an ID target.
Tags for a Tag target.
Owner.
Name.
Description.

If a parameter is null, then the corresponding field is not modified.

Request Syntax

```
{
   "Description": "string",
   "Name": "string",
   "OwnerInformation": "string",
   "Replace": boolean,
   "Targets": [
      {
         "Key": "string",
         "Values": [ "string" ]
      }
   ],
   "WindowId": "string",
   "WindowTargetId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 461).

The request accepts the following data in JSON format.

**Description (p. 290)**

An optional description for the update.

Type: String


Required: No

**Name (p. 290)**

A name for the update.

Type: String

Pattern: ^[a-zA-Z0-9-_\.]{3,128}$
Required: No

**OwnerInformation (p. 290)**
User-provided value that will be included in any CloudWatch events raised while running tasks for these targets in this Maintenance Window.

Type: String
Required: No

**Replace (p. 290)**
If True, then all fields that are required by the RegisterTargetWithMaintenanceWindow action are also required for this API request. Optional fields that are not specified are set to null.

Type: Boolean
Required: No

**Targets (p. 290)**
The targets to add or replace.

Type: Array of Target (p. 460) objects
Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No

**WindowId (p. 290)**
The Maintenance Window ID with which to modify the target.

Type: String
Pattern: ^mw-[0-9a-f]{17}$
Required: Yes

**WindowTargetId (p. 290)**
The target ID to modify.

Type: String
Length Constraints: Fixed length of 36.
Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$
Required: Yes

## Response Syntax

```json
{
    "Description": "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.

Description (p. 291)

  The updated description.

  Type: String


Name (p. 291)

  The updated name.

  Type: String


  Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

OwnerInformation (p. 291)

  The updated owner.

  Type: String


Targets (p. 291)

  The updated targets.

  Type: Array of Target (p. 460) objects

  Array Members: Minimum number of 0 items. Maximum number of 5 items.

WindowId (p. 291)

  The Maintenance Window ID specified in the update request.

  Type: String


  Pattern: ^mw-[0-9a-f]{17}$

WindowTargetId (p. 291)

  The target ID specified in the update request.
Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateMaintenanceWindowTask

Modifies a task assigned to a Maintenance Window. You can't change the task type, but you can change the following values:

Task ARN. For example, you can change a RUN_COMMAND task from AWS-RunPowerShellScript to AWS-RunShellScript.

Service role ARN.

Task parameters.

Task priority.

Task MaxConcurrency and MaxErrors.

Log location.

If a parameter is null, then the corresponding field is not modified. Also, if you set Replace to true, then all fields required by the RegisterTaskWithMaintenanceWindow action are required for this request. Optional fields that aren't specified are set to null.

Request Syntax

```json
{
    "Description": "string",
    "LoggingInfo": {
        "S3BucketName": "string",
        "S3KeyPrefix": "string",
        "S3Region": "string"
    },
    "MaxConcurrency": "string",
    "MaxErrors": "string",
    "Name": "string",
    "Priority": number,
    "Replace": boolean,
    "ServiceRoleArn": "string",
    "Targets": [ {
        "Key": "string",
        "Values": [ "string" ]
    } ],
    "TaskArn": "string",
    "TaskInvocationParameters": {
        "Automation": {
            "DocumentVersion": "string",
            "Parameters": {
                "string": [ "string" ]
            }
        },
        "Lambda": {
            "ClientContext": "string",
            "Payload": blob,
            "Qualifier": "string"
        },
        "RunCommand": {
            "Comment": "string",
            "DocumentHash": "string",
            "DocumentHashType": "string",
            "NotificationConfig": {
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

Description (p. 294)

The new task description to specify.

Type: String


Required: No

LoggingInfo (p. 294)

The new logging location in Amazon S3 to specify.

Type: LoggingInfo (p. 395) object

Required: No

MaxConcurrency (p. 294)

The new MaxConcurrency value you want to specify. MaxConcurrency is the number of targets that are allowed to run this task in parallel.

Type: String


Pattern: ^([1-9][0-9]*|[1-9][0-9]%|[1-9]%|100%)$  

Required: No
MaxErrors (p. 294)

The new MaxErrors value to specify. MaxErrors is the maximum number of errors that are allowed before the task stops being scheduled.

Type: String


Pattern: ^([1-9][0-9]*|[0][1-9][0-9]%|[0-9]%|100%)$

Required: No

Name (p. 294)

The new task name to specify.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

Priority (p. 294)

The new task priority to specify. The lower the number, the higher the priority. Tasks that have the same priority are scheduled in parallel.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

Replace (p. 294)

If True, then all fields that are required by the RegisterTaskWithMaintenanceWindow action are also required for this API request. Optional fields that are not specified are set to null.

Type: Boolean

Required: No

ServiceRoleArn (p. 294)

The IAM service role ARN to modify. The system assumes this role during task execution.

Type: String

Required: No

Targets (p. 294)

The targets (either instances or tags) to modify. Instances are specified using Key=instanceids,Values=instanceID_1,instanceID_2. Tags are specified using Key=tag_name,Values=tag_value.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No
**TaskArn (p. 294)**

The task ARN to modify.

Type: String


Required: No

**TaskInvocationParameters (p. 294)**

The parameters that the task should use during execution. Populate only the fields that match the task type. All other fields should be empty.

Type: MaintenanceWindowTaskInvocationParameters (p. 416) object

Required: No

**TaskParameters (p. 294)**

The parameters to modify. The map has the following format:

Key: string, between 1 and 255 characters  
Value: an array of strings, each string is between 1 and 255 characters

Type: String to MaintenanceWindowTaskParameterValueExpression (p. 417) object map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**WindowId (p. 294)**

The Maintenance Window ID that contains the task to modify.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: Yes

**WindowTaskId (p. 294)**

The task ID to modify.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: Yes

---

**Response Syntax**

```json
{
    "Description": "string",
    "LoggingInfo": {
        ...
    }
}
```
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.
**Description (p. 297)**

The updated task description.

Type: String


**LoggingInfo (p. 297)**

The updated logging information in Amazon S3.

Type: LoggingInfo (p. 395) object

**MaxConcurrency (p. 297)**

The updated MaxConcurrency value.

Type: String


Pattern: `^([1-9][0-9]*|[1-9][0-9]%|[1-9]%|100%)$`

**MaxErrors (p. 297)**

The updated MaxErrors value.

Type: String


Pattern: `^([1-9][0-9]*|[0]|[1-9][0-9]%|[0-9]%|100%)$`

**Name (p. 297)**

The updated task name.

Type: String


Pattern: `^[a-zA-Z0-9_\-\.]{3,128}$`

**Priority (p. 297)**

The updated priority value.

Type: Integer

Valid Range: Minimum value of 0.

**ServiceRoleArn (p. 297)**

The updated service role ARN value.

Type: String

**Targets (p. 297)**

The updated target values.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

**TaskArn (p. 297)**

The updated task ARN value.
TaskInvocationParameters (p. 297)

The updated parameter values.

Type: MaintenanceWindowTaskInvocationParameters (p. 416) object

TaskParameters (p. 297)

The updated parameter values.

Type: String to MaintenanceWindowTaskParameterValueExpression (p. 417) object map

WindowId (p. 297)

The ID of the Maintenance Window that was updated.

Type: String


Pattern: ^mw-[0-9a-f]{17}$

WindowTaskId (p. 297)

The task ID of the Maintenance Window that was updated.

Type: String

Length Constraints: Fixed length of 36.

Pattern:^[0-9a-zA-F]{8}-[0-9a-zA-F]{4}-[0-9a-zA-F]{4}-[0-9a-zA-F]{4}-[0-9a-zA-F]{12}$

Errors

For information about the errors that are common to all actions, see Common Errors (p. 463).

DoesNotExistException

Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.

For information about resource limits in Systems Manager, see AWS Systems Manager Limits.

HTTP Status Code: 400

InternalServerError

An error occurred on the server side.

HTTP Status Code: 400

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdateManagedInstanceRole

Assigns or changes an Amazon Identity and Access Management (IAM) role to the managed instance.

Request Syntax

```json
{
    "IamRole": "string",
    "InstanceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 461).

The request accepts the following data in JSON format.

**IamRole (p. 302)**

The IAM role you want to assign or change.

Type: String

Length Constraints: Maximum length of 64.

Required: Yes

**InstanceId (p. 302)**

The ID of the managed instance where you want to update the role.

Type: String

Pattern: ^mi-[0-9a-f]{17}$

Required: Yes

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. 463).

**InternalServerError**

An error occurred on the server side.

HTTP Status Code: 400

**InvalidInstanceId**

The following problems can cause this exception:

- You do not have permission to access the instance.
The SSM Agent is not running. On managed instances and Linux instances, verify that the SSM Agent is running. On EC2 Windows instances, verify that the EC2Config service is running.

The SSM Agent or EC2Config service is not registered to the SSM endpoint. Try reinstalling the SSM Agent or EC2Config service.

The instance is not in valid state. Valid states are: Running, Pending, Stopped, Stopping. Invalid states are: Shutting-down and Terminated.

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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
UpdatePatchBaseline

Modifies an existing patch baseline. Fields not specified in the request are left unchanged.

**Note**
For information about valid key and value pairs in `PatchFilters` for each supported operating system type, see [PatchFilter](https://docs.aws.amazon.com/systems-manager/latest/APIReference/API_PatchFilter.html).

**Request Syntax**

```json
{
  "ApprovalRules": {
    "PatchRules": [
      {
        "ApproveAfterDays": number,
        "ComplianceLevel": "string",
        "PatchFilterGroup": {
          "PatchFilters": [
            {
              "Key": "string",
              "Values": [ "string" ]
            }
          ]
        }
      }
    ],
    "ApprovedPatches": [ "string" ],
    "ApprovedPatchesComplianceLevel": "string",
    "BaselineId": "string",
    "Description": "string",
    "GlobalFilters": {
      "PatchFilters": [
        {
          "Key": "string",
          "Values": [ "string" ]
        }
      ]
    },
    "Name": "string",
    "RejectedPatches": [ "string" ]
  }
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](https://docs.aws.amazon.com/systems-manager/latest/APIReference/Content/Overview/Parameters/Overview.html).

The request accepts the following data in JSON format.

**ApprovalRules (p. 304)**

A set of rules used to include patches in the baseline.

Type: [PatchRuleGroup](https://docs.aws.amazon.com/systems-manager/latest/APIReference/API_PatchRuleGroup.html) object

Required: No

**ApprovedPatches (p. 304)**

A list of explicitly approved patches for the baseline.
Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

ApprovedPatchesComplianceLevel (p. 304)
Assigns a new compliance severity level to an existing patch baseline.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: No

BaselineId (p. 304)
The ID of the patch baseline to update.

Type: String


Pattern: ^[a-zA-Z0-9_\-:/\]{20,128}$

Required: Yes

Description (p. 304)
A description of the patch baseline.

Type: String


Required: No

GlobalFilters (p. 304)
A set of global filters used to exclude patches from the baseline.

Type: PatchFilterGroup (p. 437) object

Required: No

Name (p. 304)
The name of the patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.\]\{3,128\}$

Required: No

RejectedPatches (p. 304)
A list of explicitly rejected patches for the baseline.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.
Response Syntax

```json
{
  "ApprovalRules": {
    "PatchRules": [
      {
        "ApproveAfterDays": number,
        "ComplianceLevel": "string",
        "PatchFilterGroup": {
          "PatchFilters": [
            {
              "Key": "string",
              "Values": [ "string" ]
            }
          ]
        }
      }
    ],
    "ApprovedPatches": [ "string" ],
    "ApprovedPatchesComplianceLevel": "string",
    "BaselineId": "string",
    "CreatedDate": number,
    "Description": "string",
    "GlobalFilters": {
      "PatchFilters": [
        {
          "Key": "string",
          "Values": [ "string" ]
        }
      ]
    },
    "ModifiedDate": number,
    "Name": "string",
    "OperatingSystem": "string",
    "RejectedPatches": [ "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.

**ApprovalRules (p. 306)**

A set of rules used to include patches in the baseline.

Type: PatchRuleGroup (p. 441) object

**ApprovedPatches (p. 306)**

A list of explicitly approved patches for the baseline.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.
Length Constraints: Minimum length of 1. Maximum length of 100.

**ApprovedPatchesComplianceLevel (p. 306)**

The compliance severity level assigned to the patch baseline after the update completed.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

**BaselineId (p. 306)**

The ID of the deleted patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-:/]{20,128}$

**CreatedDate (p. 306)**

The date when the patch baseline was created.

Type: Timestamp

**Description (p. 306)**

A description of the Patch Baseline.

Type: String


**GlobalFilters (p. 306)**

A set of global filters used to exclude patches from the baseline.

Type: PatchFilterGroup (p. 437) object

**ModifiedDate (p. 306)**

The date when the patch baseline was last modified.

Type: Timestamp

**Name (p. 306)**

The name of the patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-._]{3,128}$

**OperatingSystem (p. 306)**

The operating system rule used by the updated patch baseline.

Type: String

Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX

**RejectedPatches (p. 306)**

A list of explicitly rejected patches for the baseline.

Type: Array of strings
Array Members: Minimum number of 0 items. Maximum number of 50 items.
Length Constraints: Minimum length of 1. Maximum length of 100.

Errors
For information about the errors that are common to all actions, see Common Errors (p. 463).

**DoesNotExistException**
Error returned when the ID specified for a resource, such as a Maintenance Window or Patch baseline, doesn't exist.
For information about resource limits in Systems Manager, see AWS Systems Manager Limits.
HTTP Status Code: 400

**InternalServerError**
An error occurred on the server side.
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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Data Types

The Amazon Simple Systems Manager (SSM) API contains several data types that 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.

The following data types are supported:

- Activation (p. 312)
- Association (p. 314)
- AssociationDescription (p. 316)
- AssociationFilter (p. 319)
- AssociationOverview (p. 320)
- AssociationStatus (p. 321)
- AssociationVersionInfo (p. 322)
- AutomationExecution (p. 324)
- AutomationExecutionFilter (p. 328)
- AutomationExecutionMetadata (p. 329)
- Command (p. 333)
- CommandFilter (p. 337)
- CommandInvocation (p. 338)
- CommandPlugin (p. 341)
- ComplianceExecutionSummary (p. 344)
- ComplianceItem (p. 345)
- ComplianceItemEntry (p. 347)
- ComplianceStringFilter (p. 349)
- ComplianceSummaryItem (p. 350)
- CompliantSummary (p. 351)
- CreateAssociationBatchRequestEntry (p. 352)
- DescribeActivationsFilter (p. 354)
- DocumentDefaultVersionDescription (p. 355)
- DocumentDescription (p. 356)
- DocumentFilter (p. 359)
- DocumentIdentifier (p. 360)
- DocumentKeyValuesFilter (p. 362)
- DocumentParameter (p. 364)
- DocumentVersionInfo (p. 365)
- EffectivePatch (p. 367)
- FailedCreateAssociation (p. 368)
- FailureDetails (p. 369)
- InstanceAggregatedAssociationOverview (p. 370)
- InstanceAssociation (p. 371)
- InstanceAssociationOutputLocation (p. 372)
• InstanceAssociationOutputUrl (p. 373)
• InstanceAssociationStatusInfo (p. 374)
• InstanceInformation (p. 377)
• InstanceInformationFilter (p. 380)
• InstanceInformationStringFilter (p. 381)
• InstancePatchState (p. 382)
• InstancePatchStateFilter (p. 385)
• InventoryAggregator (p. 386)
• InventoryFilter (p. 387)
• InventoryItem (p. 388)
• InventoryItemAttribute (p. 390)
• InventoryItemSchema (p. 391)
• InventoryResultEntity (p. 392)
• InventoryResultItem (p. 393)
• LoggingInfo (p. 395)
• MaintenanceWindowAutomationParameters (p. 396)
• MaintenanceWindowExecution (p. 397)
• MaintenanceWindowExecutionTaskIdentity (p. 399)
• MaintenanceWindowExecutionTaskInvocationIdentity (p. 401)
• MaintenanceWindowFilter (p. 404)
• MaintenanceWindowIdentity (p. 405)
• MaintenanceWindowLambdaParameters (p. 407)
• MaintenanceWindowRunCommandParameters (p. 408)
• MaintenanceWindowStepFunctionsParameters (p. 410)
• MaintenanceWindowTarget (p. 411)
• MaintenanceWindowTask (p. 413)
• MaintenanceWindowTaskInvocationParameters (p. 416)
• MaintenanceWindowTaskParameterValueExpression (p. 417)
• NonCompliantSummary (p. 418)
• NotificationConfig (p. 419)
• Parameter (p. 420)
• ParameterHistory (p. 421)
• ParameterMetadata (p. 423)
• ParametersFilter (p. 425)
• ParameterStringFilter (p. 426)
• Patch (p. 427)
• PatchBaselineIdentity (p. 429)
• PatchComplianceData (p. 431)
• PatchFilter (p. 433)
• PatchFilterGroup (p. 437)
• PatchGroupPatchBaselineMapping (p. 438)
• PatchOrchestratorFilter (p. 439)
• PatchRule (p. 440)
• PatchRuleGroup (p. 441)
• PatchStatus (p. 442)
• ResolvedTargets (p. 443)
• ResourceComplianceSummaryItem (p. 444)
• ResourceDataSyncItem (p. 446)
• ResourceDataSyncS3Destination (p. 448)
• ResultAttribute (p. 450)
• S3OutputLocation (p. 451)
• S3OutputUrl (p. 452)
• SeveritySummary (p. 453)
• StepExecution (p. 455)
• StepExecutionFilter (p. 458)
• Tag (p. 459)
• Target (p. 460)
Activation

An activation registers one or more on-premises servers or virtual machines (VMs) with AWS so that you can configure those servers or VMs using Run Command. A server or VM that has been registered with AWS is called a managed instance.

Contents

ActivationId

The ID created by Systems Manager when you submitted the activation.

Type: String

Pattern: ^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$

Required: No

CreatedDate

The date the activation was created.

Type: Timestamp

Required: No

DefaultInstanceName

A name for the managed instance when it is created.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Pattern: ^([\p{L}\p{Z}\p{N}_\.:=+/\-_@]*)$

Required: No

Description

A user defined description of the activation.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

ExpirationDate

The date when this activation can no longer be used to register managed instances.

Type: Timestamp

Required: No

Expired

Whether or not the activation is expired.

Type: Boolean

Required: No
**IamRole**

The Amazon Identity and Access Management (IAM) role to assign to the managed instance.

Type: String

Length Constraints: Maximum length of 64.

Required: No

**RegistrationLimit**

The maximum number of managed instances that can be registered using this activation.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

**RegistrationsCount**

The number of managed instances already registered with this activation.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Association

Describes an association of a Systems Manager document and an instance.

Contents

AssociationId

The ID created by the system when you create an association. An association is a binding between a document and a set of targets with a schedule.

Type: String

Pattern: \[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}\]

Required: No

AssociationName

The association name.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]\{3,128}\$

Required: No

AssociationVersion

The association version.

Type: String

Pattern: ([$]LATEST)|([1-9]\{0-9\})

Required: No

DocumentVersion

The version of the document used in the association.

Type: String

Pattern: ([$]LATEST|[$]DEFAULT|^[1-9]\{0-9\}$)

Required: No

InstanceId

The ID of the instance.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

LastExecutionDate

The date on which the association was last run.

Type: Timestamp
Required: No

Name
The name of the Systems Manager document.
Type: String
Pattern: ^[a-zA-Z0-9\-_\.]\{3,128}\$
Required: No

Overview
Information about the association.
Type: AssociationOverview (p. 320) object
Required: No

ScheduleExpression
A cron expression that specifies a schedule when the association runs.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: No

Targets
The instances targeted by the request to create an association.
Type: Array of Target (p. 460) objects
Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AssociationDescription

Describes the parameters for a document.

Contents

AssociationId

The association ID.

Type: String

Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: No

AssociationName

The association name.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

AssociationVersion

The association version.

Type: String

Pattern: ([#]LATEST)|([1-9][0-9]*)

Required: No

Date

The date when the association was made.

Type: Timestamp

Required: No

DocumentVersion

The document version.

Type: String

Pattern: ([#]LATEST|[#]DEFAULT|^\[1-9][0-9]*$)

Required: No

InstanceId

The ID of the instance.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No
**LastExecutionDate**
The date on which the association was last run.
Type: Timestamp
Required: No

**LastSuccessfulExecutionDate**
The last date on which the association was successfully run.
Type: Timestamp
Required: No

**LastUpdateAssociationDate**
The date when the association was last updated.
Type: Timestamp
Required: No

**Name**
The name of the Systems Manager document.
Type: String
Pattern: ^[a-zA-Z0-9_\-\._]{3,128}$
Required: No

**OutputLocation**
An Amazon S3 bucket where you want to store the output details of the request.
Type: `InstanceAssociationOutputLocation` object
Required: No

**Overview**
Information about the association.
Type: `AssociationOverview` object
Required: No

**Parameters**
A description of the parameters for a document.
Type: String to array of strings map
Required: No

**ScheduleExpression**
A cron expression that specifies a schedule when the association runs.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: No
Status

The association status.

Type: AssociationStatus (p. 321) object

Required: No

Targets

The instances targeted by the request.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**AssociationFilter**

Defines a filter.

**Contents**

**key**

The name of the filter.

Type: String

Valid Values: InstanceId | Name | AssociationId | AssociationStatusName | LastExecutedBefore | LastExecutedAfter | AssociationName

Required: Yes

**value**

The filter value.

Type: String

Length Constraints: Minimum length of 1.

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
- AWS SDK for Ruby V2
AssociationOverview

Information about the association.

Contents

AssociationStatusAggregatedCount

Returns the number of targets for the association status. For example, if you created an association with two instances, and one of them was successful, this would return the count of instances by status.

Type: String to integer map

Required: No

DetailedStatus

A detailed status of the association.

Type: String

Required: No

Status

The status of the association. Status can be: Pending, Success, or Failed.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AssociationStatus

Describes an association status.

Contents

AdditionalInfo

A user-defined string.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Date

The date when the status changed.

Type: Timestamp

Required: Yes

Message

The reason for the status.

Type: String


Required: Yes

Name

The status.

Type: String

Valid Values: Pending | Success | Failed

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
- AWS SDK for Ruby V2
AssociationVersionInfo

Information about the association version.

Contents

AssociationId

The ID created by the system when the association was created.

Type: String

Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: No

AssociationName

The name specified for the association version when the association version was created.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

AssociationVersion

The association version.

Type: String

Pattern: ([#]LATEST)|([1-9][0-9]*)

Required: No

CreatedDate

The date the association version was created.

Type: Timestamp

Required: No

DocumentVersion

The version of a Systems Manager document used when the association version was created.

Type: String

Pattern: ([#]LATEST|[#]DEFAULT|^[1-9][0-9]*)

Required: No

Name

The name specified when the association was created.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No
OutputLocation

The location in Amazon S3 specified for the association when the association version was created.

Type: InstanceAssociationOutputLocation (p. 372) object

Required: No

Parameters

Parameters specified when the association version was created.

Type: String to array of strings map

Required: No

ScheduleExpression

The cron or rate schedule specified for the association when the association version was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

Targets

The targets specified for the association when the association version was created.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AutomationExecution

Detailed information about the current state of an individual Automation execution.

**Contents**

**AutomationExecutionId**

The execution ID.

Type: String

Length Constraints: Fixed length of 36.

Required: No

**AutomationExecutionStatus**

The execution status of the Automation.

Type: String

Valid Values: Pending | InProgress | Waiting | Success | TimedOut | Cancelling | Cancelled | Failed

Required: No

**CurrentAction**

The action of the currently executing step.

Type: String

Required: No

**CurrentStepName**

The name of the currently executing step.

Type: String

Required: No

**DocumentName**

The name of the Automation document used during the execution.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

**DocumentVersion**

The version of the document to use during execution.

Type: String

Pattern: ([#]LATEST|[#]DEFAULT|^[1-9][0-9]*)$

Required: No
ExecutedBy

The Amazon Resource Name (ARN) of the user who executed the automation.

Type: String
Required: No

ExecutionEndTime

The time the execution finished.

Type: Timestamp
Required: No

ExecutionStartTime

The time the execution started.

Type: Timestamp
Required: No

FailureMessage

A message describing why an execution has failed, if the status is set to Failed.

Type: String
Required: No

MaxConcurrency

The MaxConcurrency value specified by the user when the execution started.

Type: String
Pattern: ^([1-9][0-9]*|[1-9]%|100%)$
Required: No

MaxErrors

The MaxErrors value specified by the user when the execution started.

Type: String
Pattern: ^([1-9][0-9]*|[0]\|[1-9]%|100%)$
Required: No

Mode

The automation execution mode.

Type: String
Valid Values: Auto | Interactive
Required: No
Outputs
The list of execution outputs as defined in the automation document.
Type: String to array of strings map
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

Parameters
The key-value map of execution parameters, which were supplied when calling StartAutomationExecution.
Type: String to array of strings map
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

ParentAutomationExecutionId
The AutomationExecutionId of the parent automation.
Type: String
Length Constraints: Fixed length of 36.
Required: No

ResolvedTargets
A list of resolved targets in the rate control execution.
Type: ResolvedTargets (p. 443) object
Required: No

StepExecutions
A list of details about the current state of all steps that comprise an execution. An Automation document contains a list of steps that are executed in order.
Type: Array of StepExecution (p. 455) objects
Required: No

StepExecutionsTruncated
A boolean value that indicates if the response contains the full list of the Automation step executions. If true, use the DescribeAutomationStepExecutions API action to get the full list of step executions.
Type: Boolean
Required: No
**Target**

The target of the execution.

Type: String

Required: No

**TargetParameterName**

The parameter name.

Type: String


Required: No

**Targets**

The specified targets.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

---

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AutomationExecutionFilter

A filter used to match specific automation executions. This is used to limit the scope of Automation execution information returned.

Contents

Key

One or more keys to limit the results. Valid filter keys include the following: DocumentNamePrefix, ExecutionStatus, ExecutionId, ParentExecutionId, CurrentAction, StartTimeBefore, StartTimeAfter.

Type: String

Valid Values: DocumentNamePrefix | ExecutionStatus | ExecutionId | ParentExecutionId | CurrentAction | StartTimeBefore | StartTimeAfter

Required: Yes

Values

The values used to limit the execution information associated with the filter's key.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 150.

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
- AWS SDK for Ruby V2
AutomationExecutionMetadata

Details about a specific Automation execution.

Contents

**AutomationExecutionId**

The execution ID.

Type: String

Length Constraints: Fixed length of 36.

Required: No

**AutomationExecutionStatus**

The status of the execution. Valid values include: Running, Succeeded, Failed, Timed out, or Cancelled.

Type: String

Valid Values: Pending | InProgress | Waiting | Success | TimedOut | Cancelling | Cancelled | Failed

Required: No

**CurrentAction**

The action of the currently executing step.

Type: String

Required: No

**CurrentStepName**

The name of the currently executing step.

Type: String

Required: No

**DocumentName**

The name of the Automation document used during execution.

Type: String

Pattern: ^[a-zA-Z0-9_.\-]{3,128}$

Required: No

**DocumentVersion**

The document version used during the execution.

Type: String

Pattern: ([#]LATEST|[#]DEFAULT|^[1-9][0-9]*)$

Required: No
ExecutedBy

The IAM role ARN of the user who executed the Automation.

Type: String
Required: No

ExecutionEndTime

The time the execution finished. This is not populated if the execution is still in progress.

Type: Timestamp
Required: No

ExecutionStartTime

The time the execution started.

Type: Timestamp
Required: No

FailureMessage

The list of execution outputs as defined in the Automation document.

Type: String
Required: No

LogFile

An Amazon S3 bucket where execution information is stored.

Type: String
Required: No

MaxConcurrency

The MaxConcurrency value specified by the user when starting the Automation.

Type: String
Pattern: ^([1-9][0-9]*|[1-9][0-9]%|[1-9]%|100%)$
Required: No

MaxErrors

The MaxErrors value specified by the user when starting the Automation.

Type: String
Pattern: ^([1-9][0-9]*|[0][1-9][0-9]%|[0-9]%|100%)$
Required: No

Mode

The Automation execution mode.
Type: String
Valid Values: Auto | Interactive
Required: No

Outputs
The list of execution outputs as defined in the Automation document.
Type: String to array of strings map
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

ParentAutomationExecutionId
The ExecutionId of the parent Automation.
Type: String
Length Constraints: Fixed length of 36.
Required: No

ResolvedTargets
A list of targets that resolved during the execution.
Type: ResolvedTargets (p. 443) object
Required: No

Target
The list of execution outputs as defined in the Automation document.
Type: String
Required: No

TargetParameterName
The list of execution outputs as defined in the Automation document.
Type: String
Required: No

Targets
The targets defined by the user when starting the Automation.
Type: Array of Target (p. 460) objects
Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No
See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Command

Describes a command request.

Contents

CommandId

A unique identifier for this command.
Type: String
Length Constraints: Fixed length of 36.
Required: No

Comment

User-specified information about the command, such as a brief description of what the command should do.
Type: String
Length Constraints: Maximum length of 100.
Required: No

CompletedCount

The number of targets for which the command invocation reached a terminal state. Terminal states include the following: Success, Failed, Execution Timed Out, Delivery Timed Out, Canceled, Terminated, or Undeliverable.
Type: Integer
Required: No

DocumentName

The name of the document requested for execution.
Type: String
Pattern: ^\[a-zA-Z0-9\-_\.\]{3,128}$
Required: No

ErrorCount

The number of targets for which the status is Failed or Execution Timed Out.
Type: Integer
Required: No

ExpiresAfter

If this time is reached and the command has not already started executing, it will not execute. Calculated based on the ExpiresAfter user input provided as part of the SendCommand API.
Type: Timestamp
Required: No
**InstanceIds**

The instance IDs against which this command was requested.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

**MaxConcurrency**

The maximum number of instances that are allowed to execute the command at the same time. You can specify a number of instances, such as 10, or a percentage of instances, such as 10%. The default value is 50. For more information about how to use MaxConcurrency, see Executing a Command Using Systems Manager Run Command.

Type: String


Pattern: ^([1-9]\[0-9]*|[1-9]\[0-9]%|[1-9]\%|100\%)$

Required: No

**MaxErrors**

The maximum number of errors allowed before the system stops sending the command to additional targets. You can specify a number of errors, such as 10, or a percentage of errors, such as 10%. The default value is 50. For more information about how to use MaxErrors, see Executing a Command Using Systems Manager Run Command.

Type: String


Pattern: ^([1-9]\[0-9]*|[0]|1-9\%|0-9\%|100\%)$

Required: No

**NotificationConfig**

Configurations for sending notifications about command status changes.

Type: NotificationConfig (p. 419) object

Required: No

**OutputS3BucketName**

The S3 bucket where the responses to the command executions should be stored. This was requested when issuing the command.

Type: String


Required: No

**OutputS3KeyPrefix**

The S3 directory path inside the bucket where the responses to the command executions should be stored. This was requested when issuing the command.
Type: String
Length Constraints: Maximum length of 500.
Required: No

**OutputS3Region**

(Deprecated) You can no longer specify this parameter. The system ignores it. Instead, Systems Manager automatically determines the Amazon S3 bucket region.

Type: String
Required: No

**Parameters**

The parameter values to be inserted in the document when executing the command.

Type: String to array of strings map
Required: No

**RequestedDateTime**

The date and time the command was requested.

Type: Timestamp
Required: No

**ServiceRole**

The IAM service role that Run Command uses to act on your behalf when sending notifications about command status changes.

Type: String
Required: No

**Status**

The status of the command.

Type: String

Valid Values: Pending | InProgress | Success | Cancelled | Failed | TimedOut | Cancelling

Required: No

**StatusDetails**

A detailed status of the command execution. StatusDetails includes more information than Status because it includes states resulting from error and concurrency control parameters. StatusDetails can show different results than Status. For more information about these statuses, see Run Command Status. StatusDetails can be one of the following values:

- Pending: The command has not been sent to any instances.
- In Progress: The command has been sent to at least one instance but has not reached a final state on all instances.
- Success: The command successfully executed on all invocations. This is a terminal state.
- Delivery Timed Out: The value of MaxErrors or more command invocations shows a status of Delivery Timed Out. This is a terminal state.
Execution Timed Out: The value of MaxErrors or more command invocations shows a status of Execution Timed Out. This is a terminal state.

Failed: The value of MaxErrors or more command invocations shows a status of Failed. This is a terminal state.

Incomplete: The command was attempted on all instances and one or more invocations does not have a value of Success but not enough invocations failed for the status to be Failed. This is a terminal state.

Canceled: The command was terminated before it was completed. This is a terminal state.

Rate Exceeded: The number of instances targeted by the command exceeded the account limit for pending invocations. The system has canceled the command before executing it on any instance. This is a terminal state.

**TargetCount**

The number of targets for the command.

Type: Integer

Required: No

**Targets**

An array of search criteria that targets instances using a Key,Value combination that you specify. Targets is required if you don’t provide one or more instance IDs in the call.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CommandFilter

Describes a command filter.

Contents

key

The name of the filter.

Type: String

Valid Values: InvokedAfter | InvokedBefore | Status

Required: Yes

value

The filter value.

Type: String

Length Constraints: Minimum length of 1.

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
- AWS SDK for Ruby V2
CommandInvocation

An invocation is copy of a command sent to a specific instance. A command can apply to one or more instances. A command invocation applies to one instance. For example, if a user executes SendCommand against three instances, then a command invocation is created for each requested instance ID. A command invocation returns status and detail information about a command you executed.

Contents

CommandId

The command against which this invocation was requested.

Type: String

Length Constraints: Fixed length of 36.

Required: No

CommandPlugins

Type: Array of CommandPlugin (p. 341) objects

Required: No

Comment

User-specified information about the command, such as a brief description of what the command should do.

Type: String

Length Constraints: Maximum length of 100.

Required: No

DocumentName

The document name that was requested for execution.

Type: String

Pattern: ^[a-zA-Z0-9_]\-\(3,128)$

Required: No

InstanceId

The instance ID in which this invocation was requested.

Type: String

Pattern: (^\w\(8\)|\w\(17\))\(3,128\)$

Required: No

InstanceName

The name of the invocation target. For Amazon EC2 instances this is the value for the aws:Name tag. For on-premises instances, this is the name of the instance.

Type: String
Length Constraints: Maximum length of 255.

Required: No

**NotificationConfig**

Configurations for sending notifications about command status changes on a per instance basis.

Type: NotificationConfig (p. 419) object

Required: No

**RequestedDateTime**

The time and date the request was sent to this instance.

Type: Timestamp

Required: No

**ServiceRole**

The IAM service role that Run Command uses to act on your behalf when sending notifications about command status changes on a per instance basis.

Type: String

Required: No

**StandardErrorUrl**

The URL to the plugin's StdErr file in Amazon S3, if the Amazon S3 bucket was defined for the parent command. For an invocation, StandardErrorUrl is populated if there is just one plugin defined for the command, and the Amazon S3 bucket was defined for the command.

Type: String

Required: No

**StandardOutputUrl**

The URL to the plugin's StdOut file in Amazon S3, if the Amazon S3 bucket was defined for the parent command. For an invocation, StandardOutputUrl is populated if there is just one plugin defined for the command, and the Amazon S3 bucket was defined for the command.

Type: String

Required: No

**Status**

Whether or not the invocation succeeded, failed, or is pending.

Type: String

Valid Values: Pending | InProgress | Delayed | Success | Cancelled | TimedOut | Failed | Cancelling

Required: No

**StatusDetails**

A detailed status of the command execution for each invocation (each instance targeted by the command). StatusDetails includes more information than Status because it includes states resulting from error and concurrency control parameters. StatusDetails can show different results than Status.
For more information about these statuses, see Run Command Status. StatusDetails can be one of the following values:

- Pending: The command has not been sent to the instance.
- In Progress: The command has been sent to the instance but has not reached a terminal state.
- Success: The execution of the command or plugin was successfully completed. This is a terminal state.
- Delivery Timed Out: The command was not delivered to the instance before the delivery timeout expired. Delivery timeouts do not count against the parent command's MaxErrors limit, but they do contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- Execution Timed Out: Command execution started on the instance, but the execution was not complete before the execution timeout expired. Execution timeouts count against the MaxErrors limit of the parent command. This is a terminal state.
- Failed: The command was not successful on the instance. For a plugin, this indicates that the result code was not zero. For a command invocation, this indicates that the result code for one or more plugins was not zero. Invocation failures count against the MaxErrors limit of the parent command. This is a terminal state.
- Canceled: The command was terminated before it was completed. This is a terminal state.
- Undeliverable: The command can't be delivered to the instance. The instance might not exist or might not be responding. Undeliverable invocations don't count against the parent command's MaxErrors limit and don't contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- Terminated: The parent command exceeded its MaxErrors limit and subsequent command invocations were canceled by the system. This is a terminal state.

Type: String
Length Constraints: Minimum length of 0. Maximum length of 100.
Required: No

TraceOutput

Gets the trace output sent by the agent.
Type: String
Length Constraints: Maximum length of 2500.
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
CommandPlugin

Describes plugin details.

Contents

Name

The name of the plugin. Must be one of the following: aws:updateAgent, aws:domainjoin, aws:applications, aws:runPowerShellScript, aws:psmodule, aws:cloudWatch, aws:runShellScript, or aws:updateSSMAgent.

Type: String
Required: No

Output

Output of the plugin execution.

Type: String
Length Constraints: Maximum length of 2500.
Required: No

OutputS3BucketName

The S3 bucket where the responses to the command executions should be stored. This was requested when issuing the command. For example, in the following response:

test_folder/ab19cb99-a030-46dd-9dfc-8eSAMPLEPre-Fix/i-1234567876543/awsrunShellScript
test_folder is the name of the Amazon S3 bucket;
ab19cb99-a030-46dd-9dfc-8eSAMPLEPre-Fix is the name of the S3 prefix;
i-1234567876543 is the instance ID;
awsrunShellScript is the name of the plugin.

Type: String
Required: No

OutputS3KeyPrefix

The S3 directory path inside the bucket where the responses to the command executions should be stored. This was requested when issuing the command. For example, in the following response:

test_folder/ab19cb99-a030-46dd-9dfc-8eSAMPLEPre-Fix/i-1234567876543/awsrunShellScript
test_folder is the name of the Amazon S3 bucket;
ab19cb99-a030-46dd-9dfc-8eSAMPLEPre-Fix is the name of the S3 prefix;
i-1234567876543 is the instance ID;
**awsrunShellScript** is the name of the plugin.

*Type: String*

*Length Constraints: Maximum length of 500.*

*Required: No*

**OutputS3Region**

(Deprecated) You can no longer specify this parameter. The system ignores it. Instead, Systems Manager automatically determines the Amazon S3 bucket region.

*Type: String*


*Required: No*

**ResponseCode**

A numeric response code generated after executing the plugin.

*Type: Integer*

*Required: No*

**ResponseFinishDateTime**

The time the plugin stopped executing. Could stop prematurely if, for example, a cancel command was sent.

*Type: Timestamp*

*Required: No*

**ResponseStartDateTime**

The time the plugin started executing.

*Type: Timestamp*

*Required: No*

**StandardErrorUrl**

The URL for the complete text written by the plugin to stderr. If execution is not yet complete, then this string is empty.

*Type: String*

*Required: No*

**StandardOutputUrl**

The URL for the complete text written by the plugin to stdout in Amazon S3. If the Amazon S3 bucket for the command was not specified, then this string is empty.

*Type: String*

*Required: No*

**Status**

The status of this plugin. You can execute a document with multiple plugins.

*Type: String*
Valid Values: Pending | InProgress | Success | TimedOut | Cancelled | Failed

Required: No

**StatusDetails**

A detailed status of the plugin execution. StatusDetails includes more information than Status because it includes states resulting from error and concurrency control parameters. StatusDetails can show different results than Status. For more information about these statuses, see Run Command Status. StatusDetails can be one of the following values:

- **Pending**: The command has not been sent to the instance.
- **In Progress**: The command has been sent to the instance but has not reached a terminal state.
- **Success**: The execution of the command or plugin was successfully completed. This is a terminal state.
- **Delivery Timed Out**: The command was not delivered to the instance before the delivery timeout expired. Delivery timeouts do not count against the parent command's MaxErrors limit, but they do contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- **Execution Timed Out**: Command execution started on the instance, but the execution was not complete before the execution timeout expired. Execution timeouts count against the MaxErrors limit of the parent command. This is a terminal state.
- **Failed**: The command was not successful on the instance. For a plugin, this indicates that the result code was not zero. For a command invocation, this indicates that the result code for one or more plugins was not zero. Invocation failures count against the MaxErrors limit of the parent command. This is a terminal state.
- **Canceled**: The command was terminated before it was completed. This is a terminal state.
- **Undeliverable**: The command can't be delivered to the instance. The instance might not exist, or it might not be responding. Undeliverable invocations don't count against the parent command's MaxErrors limit, and they don't contribute to whether the parent command status is Success or Incomplete. This is a terminal state.
- **Terminated**: The parent command exceeded its MaxErrors limit and subsequent command invocations were canceled by the system. This is a terminal state.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 100.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ComplianceExecutionSummary

A summary of the call execution that includes an execution ID, the type of execution (for example, Command), and the date/time of the execution using a datetime object that is saved in the following format: yyyy-MM-dd'T'HH:mm:ss'Z'.

**Contents**

**ExecutionId**

An ID created by the system when PutComplianceItems was called. For example, CommandID is a valid execution ID. You can use this ID in subsequent calls.

Type: String

Length Constraints: Maximum length of 100.

Required: No

**ExecutionTime**

The time the execution ran as a datetime object that is saved in the following format: yyyy-MM-dd'T'HH:mm:ss'Z'.

Type: Timestamp

Required: Yes

**ExecutionType**

The type of execution. For example, Command is a valid execution type.

Type: String

Length Constraints: Maximum length of 50.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ComplianceItem

Information about the compliance as defined by the resource type. For example, for a patch resource type, Items includes information about the PatchSeverity, Classification, etc.

Contents

ComplianceType

The compliance type. For example, Association (for a State Manager association), Patch, or Custom: string are all valid compliance types.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: [A-Za-z0-9\-_\w]+|Custom:[a-zA-Z0-9\-_\w]+

Required: No

Details

A "Key": "Value" tag combination for the compliance item.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Required: No

ExecutionSummary

A summary for the compliance item. The summary includes an execution ID, the execution type (for example, command), and the execution time.

Type: ComplianceExecutionSummary (p. 344) object

Required: No

Id

An ID for the compliance item. For example, if the compliance item is a Windows patch, the ID could be the number of the KB article. Here's an example: KB4010320.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

ResourceId

An ID for the resource. For a managed instance, this is the instance ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No
ResourceType

The type of resource. ManagedInstance is currently the only supported resource type.

Type: String


Required: No

Severity

The severity of the compliance status. Severity can be one of the following: Critical, High, Medium, Low, Informational, Unspecified.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: No

Status

The status of the compliance item. An item is either COMPLIANT or NON_COMPLIANT.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT

Required: No

Title

A title for the compliance item. For example, if the compliance item is a Windows patch, the title could be the title of the KB article for the patch. Here’s an example: Security Update for Active Directory Federation Services.

Type: String

Length Constraints: Maximum length of 500.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ComplianceItemEntry

Information about a compliance item.

Contents

Details

A "Key": "Value" tag combination for the compliance item.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Required: No

Id

The compliance item ID. For example, if the compliance item is a Windows patch, the ID could be the number of the KB article.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

Severity

The severity of the compliance status. Severity can be one of the following: Critical, High, Medium, Low, Informational, Unspecified.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: Yes

Status

The status of the compliance item. An item is either COMPLIANT or NON_COMPLIANT.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT

Required: Yes

Title

The title of the compliance item. For example, if the compliance item is a Windows patch, the title could be the title of the KB article for the patch. Here's an example: Security Update for Active Directory Federation Services.

Type: String

Length Constraints: Maximum length of 500.

Required: No
See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ComplianceStringFilter

One or more filters. Use a filter to return a more specific list of results.

Contents

Key

The name of the filter.

Type: String


Required: No

Type

The type of comparison that should be performed for the value: Equal, NotEqual, BeginWith, LessThan, or GreaterThan.

Type: String

Valid Values: EQUAL | NOT_EQUAL | BEGIN_WITH | LESS_THAN | GREATER_THAN

Required: No

Values

The value for which to search.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ComplianceSummaryItem

A summary of compliance information by compliance type.

Contents

ComplianceType

The type of compliance item. For example, the compliance type can be Association, Patch, or Custom:string.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: [A-Za-z0-9_\-=]w+ | Custom: [a-zA-Z0-9_\-=]w+

Required: No

CompliantSummary

A list of COMPLIANT items for the specified compliance type.

Type: CompliantSummary (p. 351) object

Required: No

NonCompliantSummary

A list of NON_COMPLIANT items for the specified compliance type.

Type: NonCompliantSummary (p. 418) 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
- AWS SDK for Ruby V2
CompliantSummary

A summary of resources that are compliant. The summary is organized according to the resource count for each compliance type.

Contents

CompliantCount

The total number of resources that are compliant.

Type: Integer

Required: No

SeveritySummary

A summary of the compliance severity by compliance type.

Type: SeveritySummary (p. 453) 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
- AWS SDK for Ruby V2
CreateAssociationBatchRequestEntry

Describes the association of a Systems Manager document and an instance.

Contents

AssociationName

Specify a descriptive name for the association.
Type: String
Pattern: ^[a-zA-Z0-9_\-\s.]{3,128}$
Required: No

DocumentVersion

The document version.
Type: String
Pattern: ([$]LATEST|[$]DEFAULT|^[[1-9][0-9]*$)
Required: No

InstanceId

The ID of the instance.
Type: String
Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)
Required: No

Name

The name of the configuration document.
Type: String
Pattern: ^[a-zA-Z0-9_\-\s.]{3,128}$
Required: Yes

OutputLocation

An Amazon S3 bucket where you want to store the results of this request.
Type: InstanceAssociationOutputLocation (p. 372) object
Required: No

Parameters

A description of the parameters for a document.
Type: String to array of strings map
Required: No

ScheduleExpression

A cron expression that specifies a schedule when the association runs.
Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

**Targets**

The instances targeted by the request.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DescribeActivationsFilter

Filter for the DescribeActivation API.

**Contents**

**FilterKey**

The name of the filter.

Type: String

Valid Values: ActivationIds | DefaultInstanceName | IamRole

Required: No

**FilterValues**

The filter values.

Type: Array of strings

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DocumentDefaultVersionDescription

A default version of a document.

Contents

DefaultVersion

The default version of the document.

Type: String

Pattern: ([#$LATEST|#$DEFAULT|^1-9][0-9]*$)

Required: No

Name

The name of the document.

Type: String

Pattern: ^[a-zA-Z0-9\-_\.]{3,128}$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DocumentDescription

Describes a Systems Manager document.

Contents

CreatedDate

The date when the document was created.

Type: Timestamp

Required: No

DefaultVersion

The default version.

Type: String

Pattern: ([^LATEST][^DEFAULT]|^[1-9][0-9]*)

Required: No

Description

A description of the document.

Type: String

Required: No

DocumentFormat

The document format, either JSON or YAML.

Type: String

Valid Values: YAML  |  JSON

Required: No

DocumentType

The type of document.

Type: String

Valid Values: Command  |  Policy  |  Automation

Required: No

DocumentVersion

The document version.

Type: String

Pattern: ([^LATEST][^DEFAULT]|^[1-9][0-9]*)

Required: No

Hash

The Sha256 or Sha1 hash created by the system when the document was created.
**Note**
Sha1 hashes have been deprecated.

Type: String
Length Constraints: Maximum length of 256.
Required: No

**HashType**
Sha256 or Sha1.

**Note**
Sha1 hashes have been deprecated.

Type: String
Valid Values: Sha256 | Sha1
Required: No

**LatestVersion**
The latest version of the document.
Type: String
Pattern: ([$]LATEST|[$]DEFAULT|^\[1-9][0-9]*$)
Required: No

**Name**
The name of the Systems Manager document.
Type: String
Pattern: ^[a-zA-Z0-9_-.:/\]{3,128}$
Required: No

**Owner**
The AWS user account that created the document.
Type: String
Required: No

**Parameters**
A description of the parameters for a document.
Type: Array of DocumentParameter (p. 364) objects
Required: No

**PlatformTypes**
The list of OS platforms compatible with this Systems Manager document.
Type: Array of strings
Valid Values: Windows | Linux
Required: No
SchemaVersion

The schema version.

Type: String


Required: No

Sha1

The SHA1 hash of the document, which you can use for verification.

Type: String

Required: No

Status

The status of the Systems Manager document.

Type: String

Valid Values: Creating | Active | Updating | Deleting

Required: No

Tags

The tags, or metadata, that have been applied to the document.

Type: Array of Tag (p. 459) objects

Required: No

TargetType

The target type which defines the kinds of resources the document can run on. For example, /AWS::EC2::Instance. For a list of valid resource types, see AWS Resource Types Reference in the AWS CloudFormation User Guide.

Type: String

Length Constraints: Maximum length of 200.

Pattern: ^\/[\w\:\-\:]*$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DocumentFilter

Describes a filter.

Contents

key

The name of the filter.
Type: String
Valid Values: Name | Owner | PlatformTypes | DocumentType
Required: Yes

value

The value of the filter.
Type: String
Length Constraints: Minimum length of 1.
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
- AWS SDK for Ruby V2
DocumentIdentifier

Describes the name of a Systems Manager document.

Contents

**DocumentFormat**

The document format, either JSON or YAML.

Type: String

Valid Values: YAML | JSON

Required: No

**DocumentType**

The document type.

Type: String

Valid Values: Command | Policy | Automation

Required: No

**DocumentVersion**

The document version.

Type: String

Pattern: ([#]LATEST|[#]DEFAULT|^\[1-9][0-9]*$)

Required: No

**Name**

The name of the Systems Manager document.

Type: String

Pattern: ^[a-zA-Z0-9_./-]{3,128}$

Required: No

**Owner**

The AWS user account that created the document.

Type: String

Required: No

**PlatformTypes**

The operating system platform.

Type: Array of strings

Valid Values: Windows | Linux

Required: No
SchemaVersion

The schema version.

Type: String


Required: No

Tags

The tags, or metadata, that have been applied to the document.

Type: Array of Tag (p. 459) objects

Required: No

TargetType

The target type which defines the kinds of resources the document can run on. For example, /AWS::EC2::Instance. For a list of valid resource types, see AWS Resource Types Reference in the AWS CloudFormation User Guide.

Type: String

Length Constraints: Maximum length of 200.

Pattern: ^\/[\w\.-\/:\/]*$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DocumentKeyValuesFilter

One or more filters. Use a filter to return a more specific list of documents.

For keys, you can specify one or more tags that have been applied to a document. Other valid values include Owner, Name, PlatformTypes, and DocumentType.

Note that only one Owner can be specified in a request. For example: Key=Owner,Values=Self.

If you use Name as a key, you can use a name prefix to return a list of documents. For example, in the AWS CLI, to return a list of all documents that begin with Te, run the following command:

```
aws ssm list-documents --filters Key=Name,Values=Te
```

If you specify more than two keys, only documents that are identified by all the tags are returned in the results. If you specify more than two values for a key, documents that are identified by any of the values are returned in the results.

To specify a custom key and value pair, use the format Key=tag:[tagName],Values=[valueName]. For example, if you created a Key called region and are using the AWS CLI to call the list-documents command:

```
aws ssm list-documents --filters Key=tag:region,Values=east,west
Key=Owner,Values=Self
```

Contents

Key

The name of the filter key.

Type: String


Required: No

Values

The value for the filter key.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**DocumentParameter**

Parameters specified in a System Manager document that execute on the server when the command is run.

**Contents**

**DefaultValue**

If specified, the default values for the parameters. Parameters without a default value are required. Parameters with a default value are optional.

Type: String

Required: No

**Description**

A description of what the parameter does, how to use it, the default value, and whether or not the parameter is optional.

Type: String

Required: No

**Name**

The name of the parameter.

Type: String

Required: No

**Type**

The type of parameter. The type can be either String or StringList.

Type: String

Valid Values: String | StringList

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DocumentVersionInfo

Version information about the document.

Contents

**CreatedDate**

The date the document was created.

Type: Timestamp  
Required: No

**DocumentFormat**

The document format, either JSON or YAML.

Type: String  
Valid Values: YAML | JSON  
Required: No

**DocumentVersion**

The document version.

Type: String  
Pattern: ([\$]LATEST|[\$]DEFAULT|^[1-9][0-9]*$)  
Required: No

**IsDefaultVersion**

An identifier for the default version of the document.

Type: Boolean  
Required: No

**Name**

The document name.

Type: String  
Pattern: ^[a-zA-Z0-9-\._\-]{3,128}$  
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
EffectivePatch

The EffectivePatch structure defines metadata about a patch along with the approval state of the patch in a particular patch baseline. The approval state includes information about whether the patch is currently approved, due to be approved by a rule, explicitly approved, or explicitly rejected and the date the patch was or will be approved.

Contents

Patch

Provides metadata for a patch, including information such as the KB ID, severity, classification and a URL for where more information can be obtained about the patch.

Type: Patch (p. 427) object

Required: No

PatchStatus

The status of the patch in a patch baseline. This includes information about whether the patch is currently approved, due to be approved by a rule, explicitly approved, or explicitly rejected and the date the patch was or will be approved.

Type: PatchStatus (p. 442) 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
- AWS SDK for Ruby V2
FailedCreateAssociation

Describes a failed association.

Contents

Entry

The association.

Type: CreateAssociationBatchRequestEntry (p. 352) object

Required: No

Fault

The source of the failure.

Type: String

Valid Values: Client | Server | Unknown

Required: No

Message

A description of the failure.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
FailureDetails

Information about an Automation failure.

Contents

Details

Detailed information about the Automation step failure.

Type: String to array of strings map


Array Members: Minimum number of 0 items. Maximum number of 10 items.


Required: No

FailureStage

The stage of the Automation execution when the failure occurred. The stages include the following: InputValidation, PreVerification, Invocation, PostVerification.

Type: String

Required: No

FailureType

The type of Automation failure. Failure types include the following: Action, Permission, Throttling, Verification, Internal.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstanceAggregatedAssociationOverview

Status information about the aggregated associations.

Contents

DetailedStatus

Detailed status information about the aggregated associations.

Type: String

Required: No

InstanceAssociationStatusAggregatedCount

The number of associations for the instance(s).

Type: String to integer map

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstanceAssociation

One or more association documents on the instance.

Contents

AssociationId

The association ID.

Type: String

Pattern: [0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: No

AssociationVersion

Version information for the association on the instance.

Type: String

Pattern: ([#]LATEST)|([1-9][0-9]*)

Required: No

Content

The content of the association document for the instance(s).

Type: String

Length Constraints: Minimum length of 1.

Required: No

InstanceId

The instance ID.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstanceAssociationOutputLocation

An Amazon S3 bucket where you want to store the results of this request.

Contents

S3Location

An Amazon S3 bucket where you want to store the results of this request.

Type: S3OutputLocation (p. 451) 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
- AWS SDK for Ruby V2
InstanceAssociationOutputUrl

The URL of Amazon S3 bucket where you want to store the results of this request.

Contents

S3OutputUrl

The URL of Amazon S3 bucket where you want to store the results of this request.

Type: S3OutputUrl (p. 452) 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
- AWS SDK for Ruby V2
InstanceAssociationStatusInfo

Status information about the instance association.

Contents

AssociationId

The association ID.

Type: String

Pattern: \[0-9a-fA-F\]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}

Required: No

AssociationName

The name of the association applied to the instance.

Type: String

Pattern: ^[a-zA-Z0-9\-_\.]{3,128}$

Required: No

AssociationVersion

The version of the association applied to the instance.

Type: String

Pattern: ([\$]LATEST)|([1-9]\[0-9\]*)

Required: No

DetailedStatus

Detailed status information about the instance association.

Type: String

Required: No

DocumentVersion

The association document versions.

Type: String

Pattern: ([\$]LATEST|[^$DEFAULT]^\[1-9]\[0-9\]*)

Required: No

ErrorCode

An error code returned by the request to create the association.

Type: String

Length Constraints: Maximum length of 10.

Required: No
**ExecutionDate**

The date the instance association executed.

Type: Timestamp

Required: No

**ExecutionSummary**

Summary information about association execution.

Type: String


Required: No

**InstanceId**

The instance ID where the association was created.

Type: String

Pattern: \(^{i-(\w\{8\} | \w\{17\})} \) | (\^mi-\w\{17\}\$)

Required: No

**Name**

The name of the association.

Type: String

Pattern: ^[a-zA-Z0-9_\-\.]{3,128}$

Required: No

**OutputUrl**

A URL for an Amazon S3 bucket where you want to store the results of this request.

Type: InstanceAssociationOutputUrl (p. 373) object

Required: No

**Status**

Status information about the instance association.

Type: String

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstanceInformation

Describes a filter for a specific list of instances.

Contents

ActivationId

The activation ID created by Systems Manager when the server or VM was registered.

Type: String

Pattern: ^[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}$

Required: No

AgentVersion

The version of the SSM Agent running on your Linux instance.

Type: String

Pattern: ^[0-9]{1,6}(\.[0-9]{1,6}){2,3}$

Required: No

AssociationOverview

Information about the association.

Type: InstanceAggregatedAssociationOverview (p. 370) object

Required: No

AssociationStatus

The status of the association.

Type: String

Required: No

ComputerName

The fully qualified host name of the managed instance.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

IamRole

The Amazon Identity and Access Management (IAM) role assigned to EC2 instances or managed instances.

Type: String

Length Constraints: Maximum length of 64.

Required: No
**InstanceId**

The instance ID.

Type: String

Pattern: (^i-(\w{8}|\w{17})$)|(^mi-\w{17}$)

Required: No

**IPAddress**

The IP address of the managed instance.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 46.

Required: No

**IsLatestVersion**

Indicates whether latest version of the SSM Agent is running on your instance.

Type: Boolean

Required: No

**LastAssociationExecutionDate**

The date the association was last executed.

Type: Timestamp

Required: No

**LastPingDateTime**

The date and time when agent last pinged Systems Manager service.

Type: Timestamp

Required: No

**LastSuccessfulAssociationExecutionDate**

The last date the association was successfully run.

Type: Timestamp

Required: No

**Name**

The name of the managed instance.

Type: String

Required: No

**PingStatus**

Connection status of the SSM Agent.

Type: String

Valid Values: Online | ConnectionLost | Inactive
Required: No

**PlatformName**

The name of the operating system platform running on your instance.

Type: String

Required: No

**PlatformType**

The operating system platform type.

Type: String

Valid Values: Windows | Linux

Required: No

**PlatformVersion**

The version of the OS platform running on your instance.

Type: String

Required: No

**RegistrationDate**

The date the server or VM was registered with AWS as a managed instance.

Type: Timestamp

Required: No

**ResourceType**

The type of instance. Instances are either EC2 instances or managed instances.

Type: String

Valid Values: ManagedInstance | Document | EC2Instance

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstanceInformationFilter

Describes a filter for a specific list of instances.

**Contents**

**key**

The name of the filter.

Type: String

Valid Values: `InstanceIds` | `AgentVersion` | `PingStatus` | `PlatformTypes` | `ActivationIds` | `IamRole` | `ResourceType` | `AssociationStatus`

Required: Yes

**valueSet**

The filter values.

Type: Array of strings

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

Length Constraints: Minimum length of 1.

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
- AWS SDK for Ruby V2
InstanceInformationStringFilter

The filters to describe or get information about your managed instances.

Contents

Key

The filter key name to describe your instances. For example:

"InstanceId"|"AgentVersion"|"PingStatus"|"PlatformTypes"|"ActivationIds"|"IamRole"|"ResourceType"|"AssociationStatus"

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Values

The filter values.

Type: Array of strings

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

Length Constraints: Minimum length of 1.

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
- AWS SDK for Ruby V2
InstancePatchState

Defines the high-level patch compliance state for a managed instance, providing information about the number of installed, missing, not applicable, and failed patches along with metadata about the operation when this information was gathered for the instance.

Contents

BaselineId

The ID of the patch baseline used to patch the instance.

Type: String


Pattern: ^[a-zA-Z0-9_\-:/\]{20,128}$

Required: Yes

FailedCount

The number of patches from the patch baseline that were attempted to be installed during the last patching operation, but failed to install.

Type: Integer

Required: No

InstalledCount

The number of patches from the patch baseline that are installed on the instance.

Type: Integer

Required: No

InstalledOtherCount

The number of patches not specified in the patch baseline that are installed on the instance.

Type: Integer

Required: No

InstanceId

The ID of the managed instance the high-level patch compliance information was collected for.

Type: String

Pattern: (\^i-(\w{8}|\w{17})$)|(\^mi-\w{17}$)

Required: Yes

MissingCount

The number of patches from the patch baseline that are applicable for the instance but aren't currently installed.

Type: Integer

Required: No
NotApplicableCount

The number of patches from the patch baseline that aren't applicable for the instance and hence aren't installed on the instance.

Type: Integer
Required: No

Operation

The type of patching operation that was performed: SCAN (assess patch compliance state) or INSTALL (install missing patches).

Type: String
Valid Values: Scan | Install
Required: Yes

OperationEndTime

The time the most recent patching operation completed on the instance.

Type: Timestamp
Required: Yes

OperationStartTime

The time the most recent patching operation was started on the instance.

Type: Timestamp
Required: Yes

OwnerInformation

Placeholder information, this field will always be empty in the current release of the service.

Type: String
Required: No

PatchGroup

The name of the patch group the managed instance belongs to.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: ^([\p{L}\p{Z}\p{N}_.:/=\-@]*)$
Required: Yes

SnapshotId

The ID of the patch baseline snapshot used during the patching operation when this compliance data was collected.

Type: String
Length Constraints: Fixed length of 36.
Pattern: \^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InstancePatchStateFilter

Defines a filter used in DescribeInstancePatchStatesForPatchGroup used to scope down the information returned by the API.

Contents

Key

The key for the filter. Supported values are FailedCount, InstalledCount, InstalledOtherCount, MissingCount and NotApplicableCount.

Type: String


Required: Yes

Type

The type of comparison that should be performed for the value: Equal, NotEqual, LessThan or GreaterThan.

Type: String

Valid Values: Equal | NotEqual | LessThan | GreaterThan

Required: Yes

Values

The value for the filter, must be an integer greater than or equal to 0.

Type: Array of strings

Array Members: Fixed number of 1 item.

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
- AWS SDK for Ruby V2
InventoryAggregator

Specifies the inventory type and attribute for the aggregation execution.

Contents

Aggregators

Nested aggregators to further refine aggregation for an inventory type.

Type: Array of `InventoryAggregator` (p. 386) objects

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Required: No

Expression

The inventory type and attribute name for aggregation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InventoryFilter

One or more filters. Use a filter to return a more specific list of results.

Contents

Key

The name of the filter key.

Type: String


Required: Yes

Type

The type of filter. Valid values include the following:

"Equal" | "NotEqual" | "BeginWith" | "LessThan" | "GreaterThan"

Type: String

Valid Values: Equal | NotEqual | BeginWith | LessThan | GreaterThan

Required: No

Values

Inventory filter values. Example: inventory filter where instance IDs are specified as values
Key=AWS:InstanceInformation.InstanceId,Values= i-a12b3c4d5e6g, i-1a2b3c4d5e6,Type=Equal

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

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
- AWS SDK for Ruby V2
InventoryItem

Information collected from managed instances based on your inventory policy document

Contents

CaptureTime

The time the inventory information was collected.

Type: String

Pattern: ^(20[0-9][0-9]-(0[1-9]|1[012])-(12[0-9]|3[01]|0[1-9])(T)(2|0-3]|[0-1][0-9])([0-5][0-9]):([0-5][0-9])Z)$

Required: Yes

Content

The inventory data of the inventory type.

Type: Array of string to string maps

Array Members: Minimum number of 0 items. Maximum number of 10000 items.

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Required: No

ContentHash

MD5 hash of the inventory item type contents. The content hash is used to determine whether to update inventory information. The PutInventory API does not update the inventory item type contents if the MD5 hash has not changed since last update.

Type: String

Length Constraints: Maximum length of 256.

Required: No

Context

A map of associated properties for a specified inventory type. For example, with this attribute, you can specify the ExecutionId, ExecutionType, ComplianceType properties of the AWS:ComplianceItem type.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Required: No

SchemaVersion

The schema version for the inventory item.

Type: String
TypeName

The name of the inventory type. Default inventory item type names start with AWS. Custom inventory type names will start with Custom. Default inventory item types include the following: AWS:AWSComponent, AWS:Application, AWS:InstanceInformation, AWS:Network, and AWS:WindowsUpdate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^(AWS|Custom):.*$

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
- AWS SDK for Ruby V2
InventoryItemAttribute

Attributes are the entries within the inventory item content. It contains name and value.

Contents

DataType

The data type of the inventory item attribute.

Type: String

Valid Values: string | number

Required: Yes

Name

Name of the inventory item attribute.

Type: String

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
- AWS SDK for Ruby V2
InventoryItemSchema

The inventory item schema definition. Users can use this to compose inventory query filters.

Contents

Attributes

The schema attributes for inventory. This contains data type and attribute name.

Type: Array of InventoryItemAttribute (p. 390) objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: Yes

DisplayName

The alias name of the inventory type. The alias name is used for display purposes.

Type: String

Required: No

TypeName

The name of the inventory type. Default inventory item type names start with AWS. Custom inventory type names will start with Custom. Default inventory item types include the following: AWS:AWSComponent, AWS:Application, AWS:InstanceInformation, AWS:Network, and AWS:WindowsUpdate.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^AWS|Custom).**$

Required: Yes

Version

The schema version for the inventory item.

Type: String

Pattern: ^([0-9]{1,6})(\.[0-9]{1,6})$\.[0-9]{1,6})$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InventoryResultEntity

Inventory query results.

Contents

Data

The data section in the inventory result entity JSON.

Type: String to InventoryResultItem (p. 393) object map

Required: No

Id

ID of the inventory result entity. For example, for managed instance inventory the result will be the managed instance ID. For EC2 instance inventory, the result will be the instance ID.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
InventoryResultItem

The inventory result item.

Contents

CaptureTime

The time inventory item data was captured.

Type: String

Pattern: ^\(20\)[0-9]+\(0[1-9]\)|[0-1][0-9]2\)\)\)\(3[01]\)|0[1-9]\)\)\)\(T\)\(2[0-3]\)|\[0-1]\)[0-9]\)\)\(\:[0-5]\)[0-9]\)\)\(\:[0-5]\)[0-9]\)\(Z\)$

Required: No

Content

Contains all the inventory data of the item type. Results include attribute names and values.

Type: Array of string to string maps

Array Members: Minimum number of 0 items. Maximum number of 10000 items.

Key Length Constraints: Minimum length of 1. Maximum length of 64.

Value Length Constraints: Minimum length of 0. Maximum length of 4096.

Required: Yes

ContentHash

MD5 hash of the inventory item type contents. The content hash is used to determine whether to update inventory information. The PutInventory API does not update the inventory item type contents if the MD5 hash has not changed since last update.

Type: String

Length Constraints: Maximum length of 256.

Required: No

SchemaVersion

The schema version for the inventory result item/

Type: String

Pattern: ^\([0-9]\)\)\(\.[0-9]\)\)\)\)\(\.[0-9]\)\)\)\)\)\)\)\)\)\)\)$

Required: Yes

TypeName

The name of the inventory result item type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^\(AWS\|Custom\)\).*$
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
- AWS SDK for Ruby V2
LoggingInfo

Information about an Amazon S3 bucket to write instance-level logs to.

Contents

S3BucketName

The name of an Amazon S3 bucket where execution logs are stored.

Type: String


Required: Yes

S3KeyPrefix

(Optional) The Amazon S3 bucket subfolder.

Type: String

Length Constraints: Maximum length of 500.

Required: No

S3Region

The region where the Amazon S3 bucket is located.

Type: String


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
- AWS SDK for Ruby V2
MaintenanceWindowAutomationParameters

The parameters for an AUTOMATION task type.

**Contents**

**DocumentVersion**

The version of an Automation document to use during task execution.

Type: String

Pattern: ([$]LATEST|[$]DEFAULT|^\d\d$)

Required: No

**Parameters**

The parameters for the AUTOMATION task.

Type: String to array of strings map


Array Members: Minimum number of 0 items. Maximum number of 10 items.


Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowExecution

Describes the information about an execution of a Maintenance Window.

Contents

EndTime

The time the execution finished.
Type: Timestamp
Required: No

StartTime

The time the execution started.
Type: Timestamp
Required: No

Status

The status of the execution.
Type: String

Valid Values: PENDING | IN_PROGRESS | SUCCESS | FAILED | TIMED_OUT | CANCELLING | CANCELLED | SKIPPED_OVERLAPPING

Required: No

StatusDetails

The details explaining the Status. Only available for certain status values.
Type: String
Length Constraints: Minimum length of 0. Maximum length of 250.
Required: No

WindowExecutionId

The ID of the Maintenance Window execution.
Type: String
Length Constraints: Fixed length of 36.
Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$
Required: No

WindowId

The ID of the Maintenance Window.
Type: String
Pattern: ^mw-[0-9a-f]{17}$
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowExecutionTaskIdentity

Information about a task execution performed as part of a Maintenance Window execution.

Contents

**EndTime**

The time the task execution finished.

Type: Timestamp

Required: No

**StartTime**

The time the task execution started.

Type: Timestamp

Required: No

**Status**

The status of the task execution.

Type: String

Valid Values: PENDING | IN_PROGRESS | SUCCESS | FAILED | TIMED_OUT | CANCELLING | CANCELLED | SKIPPED_OVERLAPPING

Required: No

**StatusDetails**

The details explaining the status of the task execution. Only available for certain status values.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 250.

Required: No

**TaskArn**

The ARN of the executed task.

Type: String


Required: No

**TaskExecutionId**

The ID of the specific task execution in the Maintenance Window execution.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$
Required: No

**TaskType**

The type of executed task.

Type: String

Valid Values: **RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA**

Required: No

**WindowExecutionId**

The ID of the Maintenance Window execution that ran the task.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$`

Required: No

---

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowExecutionTaskInvocationIdentity

Describes the information about a task invocation for a particular target as part of a task execution performed as part of a Maintenance Window execution.

Contents

EndTime

The time the invocation finished.

Type: Timestamp

Required: No

ExecutionId

The ID of the action performed in the service that actually handled the task invocation. If the task type is RUN_COMMAND, this value is the command ID.

Type: String

Required: No

InvocationId

The ID of the task invocation.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}--[0-9a-fA-F]{4}--[0-9a-fA-F]{4}--[0-9a-fA-F]{4}--
[0-9a-fA-F]{12}$

Required: No

OwnerInformation

User-provided value that was specified when the target was registered with the Maintenance Window. This was also included in any CloudWatch events raised during the task invocation.

Type: String


Required: No

Parameters

The parameters that were provided for the invocation when it was executed.

Type: String

Required: No

StartTime

The time the invocation started.

Type: Timestamp

Required: No
**Status**

The status of the task invocation.

Type: String

Valid Values: PENDING | IN_PROGRESS | SUCCESS | FAILED | TIMED_OUT | CANCELLING | CANCELLED | SKIPPED_OVERLAPPING

Required: No

**StatusDetails**

The details explaining the status of the task invocation. Only available for certain Status values.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 250.

Required: No

**TaskExecutionId**

The ID of the specific task execution in the Maintenance Window execution.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: No

**TaskType**

The task type.

Type: String

Valid Values: RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA

Required: No

**WindowExecutionId**

The ID of the Maintenance Window execution that ran the task.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$

Required: No

**WindowTargetId**

The ID of the target definition in this Maintenance Window the invocation was performed for.

Type: String

Length Constraints: Maximum length of 36.

Required: No
See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowFilter

Filter used in the request.

Contents

Key

The name of the filter.

Type: String


Required: No

Values

The filter values.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowIdentity

Information about the Maintenance Window.

Contents

Cutoff

The number of hours before the end of the Maintenance Window that Systems Manager stops scheduling new tasks for execution.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 23.

Required: No

Description

A description of the Maintenance Window.

Type: String


Required: No

Duration

The duration of the Maintenance Window in hours.

Type: Integer


Required: No

Enabled

Whether the Maintenance Window is enabled.

Type: Boolean

Required: No

Name

The name of the Maintenance Window.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.]\{3,128\}$

Required: No

WindowId

The ID of the Maintenance Window.

Type: String

Pattern: ^mw-[0-9a-f]{17}$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowLambdaParameters

The parameters for a LAMBDA task type.

Contents

ClientContext

Pass client-specific information to the Lambda function that you are invoking. You can then process the client information in your Lambda function as you choose through the context variable.

Type: String


Required: No

Payload

JSON to provide to your Lambda function as input.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 4096.

Required: No

Qualifier

(Optional) Specify a Lambda function version or alias name. If you specify a function version, the action uses the qualified function ARN to invoke a specific Lambda function. If you specify an alias name, the action uses the alias ARN to invoke the Lambda function version to which the alias points.

Type: String


Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowRunCommandParameters

The parameters for a RUN_COMMAND task type.

Contents

Comment

Information about the command(s) to execute.

Type: String

Length Constraints: Maximum length of 100.

Required: No

DocumentHash

The SHA-256 or SHA-1 hash created by the system when the document was created. SHA-1 hashes have been deprecated.

Type: String

Length Constraints: Maximum length of 256.

Required: No

DocumentHashType

SHA-256 or SHA-1. SHA-1 hashes have been deprecated.

Type: String

Valid Values: Sha256 | Sha1

Required: No

NotificationConfig

Configurations for sending notifications about command status changes on a per-instance basis.

Type: NotificationConfig (p. 419) object

Required: No

OutputS3BucketName

The name of the Amazon S3 bucket.

Type: String


Required: No

OutputS3KeyPrefix

The Amazon S3 bucket subfolder.

Type: String

Length Constraints: Maximum length of 500.

Required: No
Parameters

The parameters for the RUN_COMMAND task execution.

Type: String to array of strings map

Required: No

ServiceRoleArn

The IAM service role to assume during task execution.

Type: String

Required: No

TimeoutSeconds

If this time is reached and the command has not already started executing, it doesn't execute.

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
- AWS SDK for Ruby V2
MaintenanceWindowStepFunctionsParameters

The parameters for the STEP_FUNCTION execution.

Contents

Input

The inputs for the STEP_FUNCTION task.

Type: String

Length Constraints: Maximum length of 4096.

Required: No

Name

The name of the STEP_FUNCTION task.

Type: String


Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowTarget

The target registered with the Maintenance Window.

Contents

Description

A description of the target.
Type: String
Required: No

Name

The target name.
Type: String
Pattern: ^[a-zA-Z0-9._\-\ ]{3,128}$
Required: No

OwnerInformation

User-provided value that will be included in any CloudWatch events raised while running tasks for these targets in this Maintenance Window.
Type: String
Required: No

ResourceType

The type of target.
Type: String
Valid Values: INSTANCE
Required: No

Targets

The targets (either instances or tags). Instances are specified using Key=instanceids,Values=<instanceid1>,<instanceid2>. Tags are specified using Key=<tagName>,Values=<tag value>.
Type: Array of Target (p. 460) objects
Array Members: Minimum number of 0 items. Maximum number of 5 items.
Required: No

WindowId

The Maintenance Window ID where the target is registered.
Type: String


Pattern: ^mw-[0-9a-f]{17}$

Required: No

**WindowTargetId**

The ID of the target.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{4}\-[0-9a-fA-F]{12}$

Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowTask

Information about a task defined for a Maintenance Window.

Contents

Description

A description of the task.

Type: String


Required: No

LoggingInfo

Information about an Amazon S3 bucket to write task-level logs to.

Type: LoggingInfo (p. 395) object

Required: No

MaxConcurrency

The maximum number of targets this task can be run for in parallel.

Type: String


Pattern: ^((\[1-9]\[0-9\]*|\[1-9\]\[0-9\]%|\[1-9\]%|100%)$

Required: No

MaxErrors

The maximum number of errors allowed before this task stops being scheduled.

Type: String


Pattern: ^((\[1-9]\[0-9\]*|0)|\[1-9]\[0-9\]%|0-9%|100%)$

Required: No

Name

The task name.

Type: String


Pattern: ^[^a-zA-Z0-9\-_\.]\(3,128\)$

Required: No

Priority

The priority of the task in the Maintenance Window. The lower the number, the higher the priority. Tasks that have the same priority are scheduled in parallel.
Type: Integer

Valid Range: Minimum value of 0.

Required: No

**ServiceRoleArn**

The role that should be assumed when executing the task

Type: String

Required: No

**Targets**

The targets (either instances or tags). Instances are specified using Key=instanceids,Values=<instanceid1>,<instanceid2>. Tags are specified using Key=<tag name>,Values=<tag value>.

Type: Array of Target (p. 460) objects

Array Members: Minimum number of 0 items. Maximum number of 5 items.

Required: No

**TaskArn**

The resource that the task uses during execution. For RUN_COMMAND and AUTOMATION task types, TaskArn is the Systems Manager document name or ARN. For LAMBDA tasks, it's the function name or ARN. For STEP_FUNCTION tasks, it's the state machine ARN.

Type: String


Required: No

**TaskParameters**

The parameters that should be passed to the task when it is executed.

Type: String to MaintenanceWindowTaskParameterValueExpression (p. 417) object map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

**Type**

The type of task. The type can be one of the following: RUN_COMMAND, AUTOMATION, LAMBDA, or STEP_FUNCTION.

Type: String

Valid Values: RUN_COMMAND | AUTOMATION | STEP_FUNCTIONS | LAMBDA

Required: No

**WindowId**

The Maintenance Window ID where the task is registered.

Type: String

Pattern: ^mw-[0-9a-f]{17}$
Required: No

**WindowTaskId**

The task ID.

Type: String

Length Constraints: Fixed length of 36.

Pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$
Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MaintenanceWindowTaskInvocationParameters

The parameters for task execution.

## Contents

### Automation

The parameters for a AUTOMATION task type.

Type: MaintenanceWindowAutomationParameters (p. 396) object

Required: No

### Lambda

The parameters for a LAMBDA task type.

Type: MaintenanceWindowLambdaParameters (p. 407) object

Required: No

### RunCommand

The parameters for a RUN_COMMAND task type.

Type: MaintenanceWindowRunCommandParameters (p. 408) object

Required: No

### StepFunctions

The parameters for a STEP_FUNCTION task type.

Type: MaintenanceWindowStepFunctionsParameters (p. 410) 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
- AWS SDK for Ruby V2
MaintenanceWindowTaskParameterValueExpression

Defines the values for a task parameter.

Contents

Values

This field contains an array of 0 or more strings, each 1 to 255 characters in length.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 255.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
NonCompliantSummary

A summary of resources that are not compliant. The summary is organized according to resource type.

Contents

NonCompliantCount

The total number of compliance items that are not compliant.

Type: Integer

Required: No

SeveritySummary

A summary of the non-compliance severity by compliance type

Type: SeveritySummary (p. 453) 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
- AWS SDK for Ruby V2
NotificationConfig

Configurations for sending notifications.

Contents

NotificationArn

An Amazon Resource Name (ARN) for a Simple Notification Service (SNS) topic. Run Command pushes notifications about command status changes to this topic.

Type: String

Required: No

NotificationEvents

The different events for which you can receive notifications. These events include the following: All (events), InProgress, Success, TimedOut, Cancelled, Failed. To learn more about these events, see Setting Up Events and Notifications in the AWS Systems Manager User Guide.

Type: Array of strings

Valid Values: All | InProgress | Success | TimedOut | Cancelled | Failed

Required: No

NotificationType

Command: Receive notification when the status of a command changes. Invocation: For commands sent to multiple instances, receive notification on a per-instance basis when the status of a command changes.

Type: String

Valid Values: Command | Invocation

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Parameter

An Amazon EC2 Systems Manager parameter in Parameter Store.

Contents

Name

The name of the parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Type

The type of parameter. Valid values include the following: String, String list, Secure string.

Type: String

Valid Values: String | StringList | SecureString

Required: No

Value

The parameter value.

Type: String


Required: No

Version

The parameter version.

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
- AWS SDK for Ruby V2
ParameterHistory

Information about parameter usage.

Contents

AllowedPattern

Parameter names can include the following letters and symbols.

a-zA-Z0-9_-

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

Description

Information about the parameter.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

KeyId

The ID of the query key used for this parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([a-zA-Z0-9:/_-]+)$

Required: No

LastModifiedDate

Date the parameter was last changed or updated.

Type: Timestamp

Required: No

LastModifiedUser

Amazon Resource Name (ARN) of the AWS user who last changed the parameter.

Type: String

Required: No

Name

The name of the parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.
Required: No

**Type**

The type of parameter used.

Type: String

Valid Values: String | StringList | SecureString

Required: No

**Value**

The parameter value.

Type: String


Required: No

**Version**

The parameter version.

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]
- [AWS SDK for Ruby V2]
ParameterMetadata

Metadata includes information like the ARN of the last user and the date/time the parameter was last used.

Contents

AllowedPattern

A parameter name can include only the following letters and symbols.

a-zA-Z0-9_-

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

Description

Description of the parameter actions.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

KeyId

The ID of the query key used for this parameter.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([a-zA-Z0-9:/_\-]+)$

Required: No

LastModifiedDate

Date the parameter was last changed or updated.

Type: Timestamp

Required: No

LastModifiedUser

Amazon Resource Name (ARN) of the AWS user who last changed the parameter.

Type: String

Required: No

Name

The parameter name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.
Required: No

**Type**

The type of parameter. Valid parameter types include the following: String, String list, Secure string.

Type: String

Valid Values: String | StringList | SecureString

Required: No

**Version**

The parameter version.

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
- AWS SDK for Ruby V2
ParametersFilter

This data type is deprecated. Instead, use ParameterStringFilter (p. 426).

Contents

Key

The name of the filter.

Type: String

Valid Values: Name | Type | KeyId

Required: Yes

Values

The filter values.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


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
- AWS SDK for Ruby V2
**ParameterStringFilter**

One or more filters. Use a filter to return a more specific list of results.

**Contents**

**Key**

The name of the filter.

Type: String


Pattern: `tag:.+|Name|Type|KeyId|Path`

Required: Yes

**Option**

Valid options are Equals and BeginsWith. For Path filter, valid options are Recursive and OneLevel.

Type: String


Required: No

**Values**

The value you want to search for.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Patch

Represents metadata about a patch.

Contents

Classification

The classification of the patch (for example, SecurityUpdates, Updates, CriticalUpdates).

Type: String
Required: No

ContentUrl

The URL where more information can be obtained about the patch.

Type: String
Required: No

Description

The description of the patch.

Type: String
Required: No

Id

The ID of the patch (this is different than the Microsoft Knowledge Base ID).

Type: String
Length Constraints: Minimum length of 1. Maximum length of 100.
Required: No

KbNumber

The Microsoft Knowledge Base ID of the patch.

Type: String
Required: No

Language

The language of the patch if it's language-specific.

Type: String
Required: No

MsrcNumber

The ID of the MSRC bulletin the patch is related to.

Type: String
Required: No
**MsrgSeverity**

The severity of the patch (for example Critical, Important, Moderate).

Type: String

Required: No

**Product**

The specific product the patch is applicable for (for example, WindowsServer2016).

Type: String

Required: No

**ProductFamily**

The product family the patch is applicable for (for example, Windows).

Type: String

Required: No

**ReleaseDate**

The date the patch was released.

Type: Timestamp

Required: No

**Title**

The title of the patch.

Type: String

Required: No

**Vendor**

The name of the vendor providing the patch.

Type: String

Required: No

---

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
PatchBaselineIdentity

Defines the basic information about a patch baseline.

Contents

BaselineDescription

The description of the patch baseline.

Type: String


Required: No

BaselineId

The ID of the patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-/:]^{20,128}$

Required: No

BaselineName

The name of the patch baseline.

Type: String


Pattern: ^[a-zA-Z0-9_\-\.\.]^{3,128}$

Required: No

DefaultBaseline

Whether this is the default baseline. Note that Systems Manager supports creating multiple default patch baselines. For example, you can create a default patch baseline for each operating system.

Type: Boolean

Required: No

OperatingSystem

Defines the operating system the patch baseline applies to. The Default value is WINDOWS.

Type: String

Valid Values: WINDOWS | AMAZON_LINUX | UBUNTU | REDHAT_ENTERPRISE_LINUX

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
PatchComplianceData

Information about the state of a patch on a particular instance as it relates to the patch baseline used to patch the instance.

Contents

Classification

The classification of the patch (for example, SecurityUpdates, Updates, CriticalUpdates).

Type: String

Required: Yes

InstalledTime

The date/time the patch was installed on the instance. Note that not all operating systems provide this level of information.

Type: Timestamp

Required: Yes

KBId

The operating system-specific ID of the patch.

Type: String

Required: Yes

Severity

The severity of the patch (for example, Critical, Important, Moderate).

Type: String

Required: Yes

State

The state of the patch on the instance (INSTALLED, INSTALLED_OTHER, MISSING, NOT_APPLICABLE or FAILED).

Type: String

Valid Values: INSTALLED | INSTALLED_OTHER | MISSING | NOT_APPLICABLE | FAILED

Required: Yes

Title

The title of the patch.

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
PatchFilter

Defines a patch filter.

A patch filter consists of key/value pairs, but not all keys are valid for all operating system types. For example, the key `PRODUCT` is valid for all supported operating system types. The key `MSRC_SEVERITY`, however, is valid only for Windows operating systems, and the key `SECTION` is valid only for Ubuntu operating systems.

Refer to the following sections for information about which keys may be used with each major operating system, and which values are valid for each key.

**Windows Operating Systems**

The supported keys for Windows operating systems are `PRODUCT`, `CLASSIFICATION`, and `MSRC_SEVERITY`. See the following lists for valid values for each of these keys.

**Supported key: PRODUCT**

**Supported values:**

- Windows7
- Windows8
- Windows8.1
- Windows8Embedded
- Windows10
- Windows10LTSB
- WindowsServer2008
- WindowsServer2008R2
- WindowsServer2012
- WindowsServer2012R2
- WindowsServer2016

**Supported key: CLASSIFICATION**

**Supported values:**

- CriticalUpdates
- DefinitionUpdates
- Drivers
- FeaturePacks
- SecurityUpdates
- ServicePacks
- Tools
- UpdateRollups
- Updates
- Upgrades

**Supported key: MSRC_SEVERITY**

**Supported values:**
• Critical
• Important
• Moderate
• Low
• Unspecified

Ubuntu Operating Systems

The supported keys for Ubuntu operating systems are PRODUCT, PRIORITY, and SECTION. See the following lists for valid values for each of these keys.

Supported key: PRODUCT

Supported values:
• Ubuntu14.04
• Ubuntu16.04

Supported key: PRIORITY

Supported values:
• Required
• Important
• Standard
• Optional
• Extra

Supported key: SECTION

Only the length of the key value is validated. Minimum length is 1. Maximum length is 64.

Amazon Linux Operating Systems

The supported keys for Amazon Linux operating systems are PRODUCT, CLASSIFICATION, and SEVERITY. See the following lists for valid values for each of these keys.

Supported key: PRODUCT

Supported values:
• AmazonLinux2012.03
• AmazonLinux2012.09
• AmazonLinux2013.03
• AmazonLinux2013.09
• AmazonLinux2014.03
• AmazonLinux2014.09
• AmazonLinux2015.03
• AmazonLinux2015.09
• AmazonLinux2016.03
• AmazonLinux2016.09
• AmazonLinux2017.03
• AmazonLinux2017.09

Supported key: CLASSIFICATION

Supported values:
• Security
• Bugfix
• Enhancement
• Recommended
• Newpackage

Supported key: SEVERITY

Supported values:
• Critical
• Important
• Medium
• Low

RedHat Enterprise Linux (RHEL) Operating Systems

The supported keys for RedHat Enterprise Linux operating systems are PRODUCT, CLASSIFICATION, and SEVERITY. See the following lists for valid values for each of these keys.

Supported key: PRODUCT

Supported values:
• RedhatEnterpriseLinux6.5
• RedhatEnterpriseLinux6.6
• RedhatEnterpriseLinux6.7
• RedhatEnterpriseLinux6.8
• RedhatEnterpriseLinux6.9
• RedhatEnterpriseLinux7.0
• RedhatEnterpriseLinux7.1
• RedhatEnterpriseLinux7.2
• RedhatEnterpriseLinux7.3
• RedhatEnterpriseLinux7.4

Supported key: CLASSIFICATION

Supported values:
• Security
• Bugfix
• Enhancement
• Recommended
• Newpackage
Supported key: SEVERITY

Supported values:

- Critical
- Important
- Medium
- Low

Contents

Key

The key for the filter.

See PatchFilter (p. 433) for lists of valid keys for each operating system type.

Type: String

Valid Values: PRODUCT | CLASSIFICATION | MSRC_SEVERITY | PATCH_ID | SECTION | PRIORITY | SEVERITY

Required: Yes

Values

The value for the filter key.

See PatchFilter (p. 433) for lists of valid values for each key based on operating system type.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Length Constraints: Minimum length of 1. Maximum length of 64.

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
- AWS SDK for Ruby V2
PatchFilterGroup

A set of patch filters, typically used for approval rules.

Contents

PatchFilters

The set of patch filters that make up the group.

Type: Array of PatchFilter (p. 433) objects

Array Members: Minimum number of 0 items. Maximum number of 4 items.

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
- AWS SDK for Ruby V2
PatchGroupPatchBaselineMapping

The mapping between a patch group and the patch baseline the patch group is registered with.

Contents

BaselineIdentity

The patch baseline the patch group is registered with.

Type: PatchBaselineIdentity (p. 429) object

Required: No

PatchGroup

The name of the patch group registered with the patch baseline.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([\p{L}\p{Z}\p{N}_.:/=+-@]+)$

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AWS Systems Manager API Reference
PatchOrchestratorFilter

PatchOrchestratorFilter

Defines a filter used in Patch Manager APIs.

Contents

Key

The key for the filter.
Type: String
Required: No

Values

The value for the filter.
Type: Array of strings
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
**PatchRule**

Defines an approval rule for a patch baseline.

**Contents**

**ApproveAfterDays**

The number of days after the release date of each patch matched by the rule the patch is marked as approved in the patch baseline.

Type: Integer

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

Required: Yes

**ComplianceLevel**

A compliance severity level for all approved patches in a patch baseline. Valid compliance severity levels include the following: Unspecified, Critical, High, Medium, Low, and Informational.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: No

**PatchFilterGroup**

The patch filter group that defines the criteria for the rule.

Type: PatchFilterGroup (p. 437) 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
- AWS SDK for Ruby V2
PatchRuleGroup

A set of rules defining the approval rules for a patch baseline.

Contents

PatchRules

The rules that make up the rule group.

Type: Array of PatchRule (p. 440) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

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
- AWS SDK for Ruby V2
PatchStatus

Information about the approval status of a patch.

Contents

ApprovalDate

The date the patch was approved (or will be approved if the status is PENDING_APPROVAL).
Type: Timestamp
Required: No

ComplianceLevel

The compliance severity level for a patch.
Type: String
Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED
Required: No

DeploymentStatus

The approval status of a patch (APPROVED, PENDING_APPROVAL, EXPLICIT_APPROVED, EXPLICIT_REJECTED).
Type: String
Valid Values: APPROVED | PENDING_APPROVAL | EXPLICIT_APPROVED | EXPLICIT_REJECTED
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ResolvedTargets

Information about targets that resolved during the Automation execution.

Contents

ParameterValues

A list of parameter values sent to targets that resolved during the Automation execution.

Type: Array of strings

Required: No

Truncated

A boolean value indicating whether the resolved target list is truncated.

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
- AWS SDK for Ruby V2
ResourceComplianceSummaryItem

Compliance summary information for a specific resource.

Contents

ComplianceType

The compliance type.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: [A-Za-z0-9_-]+|Custom:[a-zA-Z0-9_-]+\w+

Required: No

CompliantSummary

A list of items that are compliant for the resource.

Type: CompliantSummary (p. 351) object

Required: No

ExecutionSummary

Information about the execution.

Type: ComplianceExecutionSummary (p. 344) object

Required: No

NonCompliantSummary

A list of items that aren't compliant for the resource.

Type: NonCompliantSummary (p. 418) object

Required: No

OverallSeverity

The highest severity item found for the resource. The resource is compliant for this item.

Type: String

Valid Values: CRITICAL | HIGH | MEDIUM | LOW | INFORMATIONAL | UNSPECIFIED

Required: No

ResourceId

The resource ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

ResourceType

The resource type.
Type: String


Required: No

**Status**

The compliance status for the resource.

Type: String

Valid Values: COMPLIANT | NON_COMPLIANT

Required: No

---

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ResourceDataSyncItem

Information about a Resource Data Sync configuration, including its current status and last successful sync.

Contents

LastStatus

The status reported by the last sync.

Type: String

Valid Values: Successful | Failed | InProgress

Required: No

LastSuccessfulSyncTime

The last time the sync operations returned a status of SUCCESSFUL (UTC).

Type: Timestamp

Required: No

LastSyncTime

The last time the configuration attempted to sync (UTC).

Type: Timestamp

Required: No

S3Destination

Configuration information for the target Amazon S3 bucket.

Type: ResourceDataSyncS3Destination (p. 448) object

Required: No

SyncCreatedTime

The date and time the configuration was created (UTC).

Type: Timestamp

Required: No

SyncName

The name of the Resource Data Sync.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ResourceDataSyncS3Destination

Information about the target Amazon S3 bucket for the Resource Data Sync.

Contents

AWSKMSKeyARN

The ARN of an encryption key for a destination in Amazon S3. Must belong to the same region as the destination Amazon S3 bucket.

Type: String


Pattern: arn:.*

Required: No

BucketName

The name of the Amazon S3 bucket where the aggregated data is stored.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: Yes

Prefix

An Amazon S3 prefix for the bucket.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: No

Region

The AWS Region with the Amazon S3 bucket targeted by the Resource Data Sync.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: Yes

SyncFormat

A supported sync format. The following format is currently supported: JsonSerDe

Type: String

Valid Values: JsonSerDe

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ResultAttribute

The inventory item result attribute.

Contents

TypeName

Name of the inventory item type. Valid value: AWS:InstanceInformation. Default Value: AWS:InstanceInformation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: ^(AWS|Custom):.*$

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
- AWS SDK for Ruby V2
**S3OutputLocation**

An Amazon S3 bucket where you want to store the results of this request.

**Contents**

**OutputS3BucketName**

The name of the Amazon S3 bucket.

Type: String


Required: No

**OutputS3KeyPrefix**

The Amazon S3 bucket subfolder.

Type: String

Length Constraints: Maximum length of 500.

Required: No

**OutputS3Region**

(Deprecated) You can no longer specify this parameter. The system ignores it. Instead, Systems Manager automatically determines the Amazon S3 bucket region.

Type: String


Required: No

**See Also**

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
S3OutputUrl

A URL for the Amazon S3 bucket where you want to store the results of this request.

Contents

OutputUrl

A URL for an Amazon S3 bucket where you want to store the results of this request.

Type: String

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
SeveritySummary

The number of managed instances found for each patch severity level defined in the request filter.

Contents

CriticalCount

The total number of resources or compliance items that have a severity level of critical. Critical severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

HighCount

The total number of resources or compliance items that have a severity level of high. High severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

InformationalCount

The total number of resources or compliance items that have a severity level of informational. Informational severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

LowCount

The total number of resources or compliance items that have a severity level of low. Low severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

MediumCount

The total number of resources or compliance items that have a severity level of medium. Medium severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

UnspecifiedCount

The total number of resources or compliance items that have a severity level of unspecified. Unspecified severity is determined by the organization that published the compliance items.

Type: Integer
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
StepExecution

Detailed information about an the execution state of an Automation step.

Contents

**Action**

The action this step performs. The action determines the behavior of the step.

Type: String

Pattern: `^aws\-[a-zA-Z]{3,25}$`

Required: No

**ExecutionEndTime**

If a step has finished execution, this contains the time the execution ended. If the step has not yet concluded, this field is not populated.

Type: Timestamp

Required: No

**ExecutionStart_Time**

If a step has begun execution, this contains the time the step started. If the step is in Pending status, this field is not populated.

Type: Timestamp

Required: No

**FailureDetails**

Information about the Automation failure.

Type: `FailureDetails (p. 369)` object

Required: No

**FailureMessage**

If a step failed, this message explains why the execution failed.

Type: String

Required: No

**Inputs**

Fully-resolved values passed into the step before execution.

Type: String to string map

Required: No

**MaxAttempts**

The maximum number of tries to run the action of the step. The default value is 1.

Type: Integer
OnFailure
The action to take if the step fails. The default value is Abort.
Type: String
Required: No

Outputs
Returned values from the execution of the step.
Type: String to array of strings map
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

OverriddenParameters
A user-specified list of parameters to override when executing a step.
Type: String to array of strings map
Array Members: Minimum number of 0 items. Maximum number of 10 items.
Required: No

Response
A message associated with the response code for an execution.
Type: String
Required: No

ResponseCode
The response code returned by the execution of the step.
Type: String
Required: No

StepExecutionId
The unique ID of a step execution.
Type: String
Required: No

StepName
The name of this execution step.
Type: String
**Required:** No

**StepStatus**

The execution status for this step. Valid values include: Pending, InProgress, Success, Cancelled, Failed, and TimedOut.

Type: String

Valid Values: Pending | InProgress | Waiting | Success | TimedOut | Cancelled | Failed

Required: No

**TimeoutSeconds**

The timeout seconds of the step.

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
- AWS SDK for Ruby V2
StepExecutionFilter

A filter to limit the amount of step execution information returned by the call.

Contents

Key

One or more keys to limit the results. Valid filter keys include the following: StepName, Action, StepExecutionId, StepExecutionStatus, StartTimeBefore, StartTimeAfter.

Type: String

Valid Values: StartTimeBefore | StartTimeAfter | StepExecutionStatus | StepExecutionId | StepName | Action

Required: Yes

Values

The values of the filter key.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 1. Maximum length of 150.

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
- AWS SDK for Ruby V2
Tag

Metadata that you assign to your AWS resources. Tags enable you to categorize your resources in different ways, for example, by purpose, owner, or environment. In Systems Manager, you can apply tags to documents, managed instances, Maintenance Windows, Parameter Store parameters, and patch baselines.

Contents

Key

The name of the tag.

Type: String


Pattern: ^(?![a-zA-Z0-9aws:])(?=^[\p{L}\p{Z}\p{N}_.:/=+\-%]*\p{N}_.:*=+/\-%]*$)*$.

Required: Yes

Value

The value of the tag.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: ^([\p{L}\p{Z}\p{N}_.:/=+\-%]*$)*$.

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
- AWS SDK for Ruby V2

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Target

An array of search criteria that targets instances using a Key,Value combination that you specify. The `Targets` is required if you don't provide one or more instance IDs in the call.

Contents

**Key**

User-defined criteria for sending commands that target instances that meet the criteria. Key can be `tag:<Amazon EC2 tag>` or `InstanceId`s. For more information about how to send commands that target instances using Key,Value parameters, see [Executing a Command Using Systems Manager Run Command](#).

Type: String


Pattern: `^[\p{L}|\p{Z}|\p{N}|_.:/=\-@]*$`

Required: No

**Values**

User-defined criteria that maps to Key. For example, if you specified tag:ServerRole, you could specify value:WebServer to execute a command on instances that include Amazon EC2 tags of ServerRole,WebServer. For more information about how to send commands that target instances using Key,Value parameters, see [Executing a Command Using Systems Manager Run Command](#).

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)
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 Signature Version 4 Signing Process in the Amazon Web Services General Reference.

**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 Task 2: Create a String to Sign for Signature Version 4 in the Amazon Web Services General Reference.

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 Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

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 Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

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

**InvalidParameterCombination**
Parameters that must not be used together were used together.
HTTP Status Code: 400

**InvalidParameterValue**
An invalid or out-of-range value was supplied for the input parameter.
HTTP Status Code: 400

**InvalidQueryParameter**
The AWS query string is malformed or does not adhere to AWS standards.
HTTP Status Code: 400

**MalformedQueryString**
The query string contains a syntax error.
HTTP Status Code: 404

**MissingAction**
The request is missing an action or a required parameter.
HTTP Status Code: 400
**MissingAuthenticationToken**

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

**MissingParameter**

A required parameter for the specified action is not supplied.

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

**ValidationError**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400
Auditing Systems Manager API Calls Using AWS CloudTrail

Run Command is an extension of AWS EC2 Systems Manager. Where this document talks about Systems Manager, it includes Run Command.

Systems Manager is integrated with CloudTrail, a service that captures API calls made by or on behalf of Systems Manager and delivers the log files to an Amazon S3 bucket that you specify. The API calls can be made indirectly by using the Amazon EC2 console, AWS CLI, or AWS Tools for Windows PowerShell, or directly by using the Systems Manager API. Using the information collected by CloudTrail, you can determine what request was made, the source IP address from which the request was made, who made the request, when it was made, and so on. CloudTrail logs all Systems Manager API actions. For example, calls to execute commands using Run Command or create Systems Manager documents generate entries in CloudTrail log files. To learn more about CloudTrail, including how to configure and enable it, see the AWS CloudTrail User Guide.

Systems Manager Information in CloudTrail

When CloudTrail logging is enabled, calls made to Systems Manager actions are tracked in log files, along with any other AWS service records. CloudTrail determines when to create and write to a new file based on a specified time period and file size.

Every log entry contains information about who generated the request. The user identity information in the log helps you determine whether the request was made with root or IAM user credentials, with temporary security credentials for a role or federated user, or by another AWS service. For more information, see the `userIdentity` field in the CloudTrail Event Reference.

You can store your log files in your bucket for as long as you want, but you can also define Amazon S3 lifecycle rules to archive or delete log files automatically. By default, your log files are encrypted by using Amazon S3 server-side encryption (SSE).

You can choose to have CloudTrail publish Amazon SNS notifications when new log files are delivered if you want to take quick action upon log file delivery. For more information, see Configuring Amazon SNS Notifications.

You can also aggregate Systems Manager log files from multiple AWS regions and multiple AWS accounts into a single Amazon S3 bucket. For more information, see Aggregating CloudTrail Log Files to a Single Amazon S3 Bucket.

Understanding SSM Log File Entries

CloudTrail log files can contain one or more log entries where each entry is made up of multiple JSON-formatted events. A log entry represents a single request from any source and includes information about the requested action, any input parameters, the date and time of the action, and so on. The log entries are not in any particular order. That is, they are not an ordered stack trace of the public API calls.

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