aws

API Reference

AWS Entity Resolution

API Version 2018-05-10

AWS Entity Resolution: API Reference

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Welcome

Welcome to the *AWS Entity Resolution API Reference*.

AWS Entity Resolution is an AWS service that provides pre-configured entity resolution capabilities that enable developers and analysts at advertising and marketing companies to build an accurate and complete view of their consumers.

With AWS Entity Resolution, you can match source records containing consumer identifiers, such as name, email address, and phone number. This is true even when these records have incomplete or conflicting identifiers. For example, AWS Entity Resolution can effectively match a source record from a customer relationship management (CRM) system with a source record from a marketing system containing campaign information.

To learn more about AWS Entity Resolution concepts, procedures, and best practices, see the AWS Entity Resolution User Guide.

This document was last published on September 4, 2025.

Actions

The following actions are supported:

- AddPolicyStatement
- BatchDeleteUniqueId
- CreateIdMappingWorkflow
- CreateIdNamespace
- CreateMatchingWorkflow
- CreateSchemaMapping
- DeleteIdMappingWorkflow
- DeleteIdNamespace
- DeleteMatchingWorkflow
- DeletePolicyStatement
- DeleteSchemaMapping
- GenerateMatchId
- GetIdMappingJob
- GetIdMappingWorkflow
- GetIdNamespace
- GetMatchId
- GetMatchingJob
- GetMatchingWorkflow
- GetPolicy
- GetProviderService
- GetSchemaMapping
- ListIdMappingJobs
- ListIdMappingWorkflows
- ListIdNamespaces
- ListMatchingJobs
- ListMatchingWorkflows
- ListProviderServices

- ListSchemaMappings
- ListTagsForResource
- PutPolicy
- StartIdMappingJob
- StartMatchingJob
- TagResource
- UntagResource
- UpdateIdMappingWorkflow
- UpdateIdNamespace
- UpdateMatchingWorkflow
- UpdateSchemaMapping

AddPolicyStatement

Adds a policy statement object. To retrieve a list of existing policy statements, use the `GetPolicy` API.

Request Syntax

```
POST /policies/arn/statementId HTTP/1.1
Content-type: application/json

{
   "action": [ "string" ],
   "condition": "string",
   "effect": "string",
   "principal": [ "string" ]
}
```

URI Request Parameters

The request uses the following URI parameters.

arn

The Amazon Resource Name (ARN) of the resource that will be accessed by the principal.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

statementId

A statement identifier that differentiates the statement from others in the same policy.

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

Pattern: `[0-9A-Za-z]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

action

The action that the principal can use on the resource.

For example, `entityresolution:GetIdMappingJob`, `entityresolution:GetMatchingJob`.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Minimum length of 3. Maximum length of 64.

Pattern: `(entityresolution:[a-zA-Z0-9]+)`

Required: Yes

condition

A set of condition keys that you can use in key policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

Required: No

effect

Determines whether the permissions specified in the policy are to be allowed (`Allow`) or denied (`Deny`).

> **Important**
>
> If you set the value of the `effect` parameter to `Deny` for the `AddPolicyStatement` operation, you must also set the value of the `effect` parameter in the `policy` to `Deny` for the `PutPolicy` operation.

Type: String

Valid Values: `Allow | Deny`

Required: Yes

principal

The AWS service or AWS account that can access the resource defined as ARN.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Minimum length of 12. Maximum length of 64.

Pattern: `(\d{12})|([a-z0-9\.]+)`

Required: Yes

Response Syntax

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

{
   "arn": "string",
   "policy": "string",
   "token": "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.

arn

The Amazon Resource Name (ARN) of the resource that will be accessed by the principal.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

policy

The resource-based policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

token

A unique identifier for the current revision of the policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

BatchDeleteUniqueId

Deletes multiple unique IDs in a matching workflow.

Request Syntax

```
DELETE /matchingworkflows/workflowName/uniqueids HTTP/1.1
inputSource: inputSource
uniqueIds: uniqueIds
```

URI Request Parameters

The request uses the following URI parameters.

inputSource

The input source for the batch delete unique ID operation.

Pattern: `arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

uniqueIds

The unique IDs to delete.

Length Constraints: Minimum length of 1. Maximum length of 780.

Pattern: `[a-zA-Z_0-9-+=/,]*`

Required: Yes

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "deleted": [
      {
         "uniqueId": "string"
      }
   ],
   "disconnectedUniqueIds": [ "string" ],
   "errors": [
      {
         "errorType": "string",
         "uniqueId": "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.

deleted

The unique IDs that were deleted.

Type: Array of DeletedUniqueId objects

disconnectedUniqueIds

The unique IDs that were disconnected.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 780.

Pattern: `[a-zA-Z_0-9-+=/,]*`

errors

The errors from deleting multiple unique IDs.

Type: Array of DeleteUniqueIdError objects

status

The status of the batch delete unique ID operation.

Type: String

Valid Values: `COMPLETED | ACCEPTED`

Errors

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

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

HTTP Status Code: 400

See Also

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

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- AWS SDK for .NET

- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateIdMappingWorkflow

Creates an `IdMappingWorkflow` object which stores the configuration of the data processing job to be run. Each `IdMappingWorkflow` must have a unique workflow name. To modify an existing workflow, use the UpdateIdMappingWorkflow API.

> **Important**
>
> Incremental processing is not supported for ID mapping workflows.

Request Syntax

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

{
   "description": "string",
   "idMappingTechniques": {
      "idMappingType": "string",
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "recordMatchingModel": "string",
         "ruleDefinitionType": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      }
   },
   "inputSourceConfig": [
      {
```

```
            "inputSourceARN": "string",
            "schemaName": "string",
            "type": "string"
         }
      ],
      "outputSourceConfig": [
         {
            "KMSArn": "string",
            "outputS3Path": "string"
         }
      ],
      "roleArn": "string",
      "tags": {
         "string" : "string"
      },
      "workflowName": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

idMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Type: IdMappingTechniques object

Required: Yes

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdMappingWorkflowInputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: Yes

outputSourceConfig

A list of `IdMappingWorkflowOutputSource` objects, each of which contains fields `outputS3Path` and `KMSArn`.

Type: Array of IdMappingWorkflowOutputSource objects

Array Members: Fixed number of 1 item.

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Pattern: `$|^arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: No

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Required: No

workflowName

The name of the workflow. There can't be multiple `IdMappingWorkflows` with the same name.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Response Syntax

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

{
   "description": "string",
   "idMappingTechniques": {
      "idMappingType": "string",
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "recordMatchingModel": "string",
         "ruleDefinitionType": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      }
   },
```

```
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string",
         "type": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string"
      }
   ],
   "roleArn": "string",
   "workflowArn": "string",
   "workflowName": "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

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Type: IdMappingTechniques object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdMappingWorkflowInputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `IdMappingWorkflowOutputSource` objects, each of which contains fields `outputS3Path` and `KMSArn`.

Type: Array of IdMappingWorkflowOutputSource objects

Array Members: Fixed number of 1 item.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Pattern: `$|^arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `IDMappingWorkflow`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateIdNamespace

Creates an ID namespace object which will help customers provide metadata explaining their dataset and how to use it. Each ID namespace must have a unique name. To modify an existing ID namespace, use the UpdateIdNamespace API.

Request Syntax

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

{
   "description": "string",
   "idMappingWorkflowProperties": [
      {
         "idMappingType": "string",
         "providerProperties": {
            "providerConfiguration": JSON value,
            "providerServiceArn": "string"
         },
         "ruleBasedProperties": {
            "attributeMatchingModel": "string",
            "recordMatchingModels": [ "string" ],
            "ruleDefinitionTypes": [ "string" ],
            "rules": [
               {
                  "matchingKeys": [ "string" ],
                  "ruleName": "string"
               }
            ]
         }
      }
   ],
   "idNamespaceName": "string",
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "roleArn": "string",
   "tags": {
```

```
      "string" : "string"
   },
   "type": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

idMappingWorkflowProperties

Determines the properties of `IdMappingWorflow` where this `IdNamespace` can be used as a `Source` or a `Target`.

Type: Array of IdNamespaceIdMappingWorkflowProperties objects

Array Members: Fixed number of 1 item.

Required: No

idNamespaceName

The name of the ID namespace.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdNamespaceInputSource objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access the resources defined in this `IdNamespace` on your behalf as part of the workflow run.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: No

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Required: No

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The `SOURCE` contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The `TARGET` contains a configuration of `targetId` to which all `sourceIds` will resolve to.

Type: String

Valid Values: SOURCE | TARGET

Required: Yes

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "idMappingWorkflowProperties": [
      {
         "idMappingType": "string",
         "providerProperties": {
            "providerConfiguration": JSON value,
            "providerServiceArn": "string"
         },
         "ruleBasedProperties": {
            "attributeMatchingModel": "string",
            "recordMatchingModels": [ "string" ],
            "ruleDefinitionTypes": [ "string" ],
            "rules": [
               {
                  "matchingKeys": [ "string" ],
                  "ruleName": "string"
               }
            ]
         }
      }
   ],
   "idNamespaceArn": "string",
   "idNamespaceName": "string",
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "roleArn": "string",
```

```
   "tags": {
      "string" : "string"
   },
   "type": "string",
   "updatedAt": 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.

createdAt

The timestamp of when the ID namespace was created.

Type: Timestamp

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingWorkflowProperties

Determines the properties of `IdMappingWorkflow` where this `IdNamespace` can be used as a `Source` or a `Target`.

Type: Array of IdNamespaceIdMappingWorkflowProperties objects

Array Members: Fixed number of 1 item.

idNamespaceArn

The Amazon Resource Name (ARN) of the ID namespace.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})`

idNamespaceName

The name of the ID namespace.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdNamespaceInputSource objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access the resources defined in `inputSourceConfig` on your behalf as part of the workflow run.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The SOURCE contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The TARGET contains a configuration of `targetId` to which all `sourceIds` will resolve to.

Type: String

Valid Values: SOURCE | TARGET

updatedAt

The timestamp of when the ID namespace was last updated.

Type: Timestamp

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

HTTP Status Code: 400

See Also

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

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- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateMatchingWorkflow

Creates a matching workflow that defines the configuration for a data processing job. The workflow name must be unique. To modify an existing workflow, use `UpdateMatchingWorkflow`.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Request Syntax

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

{
   "description": "string",
   "incrementalRunConfig": {
      "incrementalRunType": "string"
   },
   "inputSourceConfig": [
      {
         "applyNormalization": boolean,
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "applyNormalization": boolean,
         "KMSArn": "string",
         "output": [
            {
               "hashed": boolean,
               "name": "string"
            }
         ],
         "outputS3Path": "string"
      }
   ],
```

```
   "resolutionTechniques": {
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "resolutionType": "string",
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "matchPurpose": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      },
      "ruleConditionProperties": {
         "rules": [
            {
               "condition": "string",
               "ruleName": "string"
            }
         ]
      }
   },
   "roleArn": "string",
   "tags": {
      "string" : "string"
   },
   "workflowName": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

incrementalRunConfig

Optional. An object that defines the incremental run type. This object contains only the `incrementalRunType` field, which appears as "Automatic" in the console.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Type: IncrementalRunConfig object

Required: No

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of InputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: Yes

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path`, `applyNormalization`, `KMSArn`, and `output`.

Type: Array of OutputSource objects

Array Members: Fixed number of 1 item.

Required: Yes

resolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Type: ResolutionTechniques object

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

Required: Yes

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Required: No

workflowName

The name of the workflow. There can't be multiple `MatchingWorkflows` with the same name.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Response Syntax

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

{
   "description": "string",
   "incrementalRunConfig": {
      "incrementalRunType": "string"
   },
   "inputSourceConfig": [
      {
         "applyNormalization": boolean,
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "applyNormalization": boolean,
         "KMSArn": "string",
         "output": [
            {
               "hashed": boolean,
               "name": "string"
            }
         ],
         "outputS3Path": "string"
      }
   ],
   "resolutionTechniques": {
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "resolutionType": "string",
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "matchPurpose": "string",
         "rules": [
```

```
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      },
      "ruleConditionProperties": {
         "rules": [
            {
               "condition": "string",
               "ruleName": "string"
            }
         ]
      }
   },
   "roleArn": "string",
   "workflowArn": "string",
   "workflowName": "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

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

incrementalRunConfig

An object which defines an incremental run type and has only `incrementalRunType` as a field.

Type: IncrementalRunConfig object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of InputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path`, `applyNormalization`, `KMSArn`, and `output`.

Type: Array of OutputSource objects

Array Members: Fixed number of 1 item.

resolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Type: ResolutionTechniques object

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `MatchingWorkflow`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})`

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

HTTP Status Code: 400

Examples

Example of a rule-based matching workflow with batch (manual) processing

The following example uses the `CreateMatchingWorkflow` API to create a rule-based matching workflow with batch processing in AWS Entity Resolution. It sets up a workflow named "sample" that uses an AWS Glue table as the input source and configures output for ID, email, and gender fields. The workflow employs rule-based matching techniques with a single rule ("Rule1") that uses the email field as a matching key. The request specifies an attribute matching model of "ONE_TO_ONE" and includes settings to not apply normalization to the input data. Since no `incrementalRunConfig` is specified, this workflow will use the default batch processing mode.

Sample Request

```
{
    "workflowName": "sample",
    "inputSourceConfig": [
        {
            "applyNormalization": false,
            "inputSourceARN": "arn:aws:glue:<region>:<accountId>:table/
<glueDatabaseName>/<glueTableName>",
            "schemaName": "sampleSchemaName"
        }
    ],
    "outputSourceConfig": [
        {
            "outputS3Path": "s3://<bucketName>/prefix",
            "output": [
                {
                    "name": "id",
                    "hashed": false
                },
                {
                    "name": "email",
                    "hashed": false
                },
                {
                    "name": "gender",
                    "hashed": false
                }
            ]
        }
```

```
    ],
    "resolutionTechniques": {
        "resolutionType": "RULE_MATCHING",
        "ruleBasedProperties": {
            "rules": [
                {
                    "ruleName": "Rule1",
                    "matchingKeys": [
                        "email"
                    ]
                }
            ],
            "attributeMatchingModel": "ONE_TO_ONE"
        }
    },
    "roleArn": "arn:aws:iam::<region>:role/passRoleArn"
}
```

Example of a rule-based matching workflow with incremental (automatic) processing

The following example uses the `CreateMatchingWorkflow` API to create a rule-based matching workflow with incremental processing in AWS Entity Resolution. It sets up a workflow named "sample" that uses an AWS Glue table as the input source and configures output for ID, email, and gender fields. The workflow employs rule-based matching techniques with a single rule ("Rule1") that uses the email field as a matching key. The request specifies an attribute matching model of "ONE_TO_ONE" and enables immediate incremental processing. It also includes settings to not apply normalization to the input data and provides the necessary IAM role for workflow execution.

Sample Request

```
{
    "workflowName": "sample",
    "inputSourceConfig": [
        {
            "applyNormalization": false,
            "inputSourceARN": "arn:aws:glue:<region>:<accountId>:table/
<glueDatabaseName>/<glueTableName>",
            "schemaName": "sampleSchemaName"
        }
    ],
    "outputSourceConfig": [
```

```
        {
            "outputS3Path": "s3://<bucketName>/prefix",
            "output": [
                {
                    "name": "id",
                    "hashed": false
                },
                {
                    "name": "email",
                    "hashed": false
                },
                {
                    "name": "gender",
                    "hashed": false
                }
            ]
        }
    ],
    "resolutionTechniques": {
        "resolutionType": "RULE_MATCHING",
        "ruleBasedProperties": {
            "rules": [
                {
                    "ruleName": "Rule1",
                    "matchingKeys": [
                        "email"
                    ]
                }
            ],
            "attributeMatchingModel": "ONE_TO_ONE"
        }
    },
    "incrementalRunConfig": {
        "incrementalRunType": "IMMEDIATE"
    },
    "roleArn": "arn:aws:iam::<region>:role/passRoleArn"
}
```

Example of a machine learning-based matching workflow

The following example uses the `CreateMatchingWorkflow` API to create a machine learning-based matching workflow in AWS Entity Resolution. It sets up a workflow named "sample" that uses an AWS Glue table as the input source, configures output for ID, email, and gender fields, and

employs ML-based matching techniques. The request specifies not to apply normalization to the input data and includes the necessary IAM role for workflow execution.

Sample Request

```
{
    "workflowName": "sample",
    "inputSourceConfig": [
        {
            "applyNormalization": false,
            "inputSourceARN": "arn:aws:glue:<region>:<accountId>:table/
<glueDatabaseName>/<glueTableName>",
            "schemaName": "sampleSchemaName"
        }
    ],
    "outputSourceConfig": [
        {
            "outputS3Path": "s3://<bucketName>/prefix",
            "output": [
                {
                    "name": "id",
                    "hashed": false
                },
                {
                    "name": "email",
                    "hashed": false
                },
                {
                    "name": "gender",
                    "hashed": false
                }
            ]
        }
    ],
    "resolutionTechniques": {
        "resolutionType": "ML_MATCHING"
    },
    "roleArn": "arn:aws:iam::<region>:role/passRoleArn"
}
```

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

CreateSchemaMapping

Creates a schema mapping, which defines the schema of the input customer records table. The SchemaMapping also provides AWS Entity Resolution with some metadata about the table, such as the attribute types of the columns and which columns to match on.

Request Syntax

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

{
   "description": "string",
   "mappedInputFields": [
      {
         "fieldName": "string",
         "groupName": "string",
         "hashed": boolean,
         "matchKey": "string",
         "subType": "string",
         "type": "string"
      }
   ],
   "schemaName": "string",
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

A description of the schema.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

mappedInputFields

A list of `MappedInputFields`. Each `MappedInputField` corresponds to a column the source data table, and contains column name plus additional information that AWS Entity Resolution uses for matching.

Type: Array of SchemaInputAttribute objects

Array Members: Minimum number of 2 items. Maximum number of 35 items.

Required: Yes

schemaName

The name of the schema. There can't be multiple `SchemaMappings` with the same name.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Required: No

Response Syntax

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

```
{
   "description": "string",
   "mappedInputFields": [
      {
         "fieldName": "string",
         "groupName": "string",
         "hashed": boolean,
         "matchKey": "string",
         "subType": "string",
         "type": "string"
      }
   ],
   "schemaArn": "string",
   "schemaName": "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

A description of the schema.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

mappedInputFields

A list of `MappedInputFields`. Each `MappedInputField` corresponds to a column the source data table, and contains column name plus additional information that AWS Entity Resolution uses for matching.

Type: Array of SchemaInputAttribute objects

Array Members: Minimum number of 2 items. Maximum number of 35 items.

schemaArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `SchemaMapping`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(schemamapping/[a-zA-Z_0-9-]{1,255})`

schemaName

The name of the schema.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteIdMappingWorkflow

Deletes the `IdMappingWorkflow` with a given name. This operation will succeed even if a workflow with the given name does not exist.

Request Syntax

```
DELETE /idmappingworkflows/workflowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow to be deleted.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "message": "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.

message

A successful operation message.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteIdNamespace

Deletes the `IdNamespace` with a given name.

Request Syntax

```
DELETE /idnamespaces/idNamespaceName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

idNamespaceName

The name of the ID namespace.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "message": "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.

message

A successful operation message.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteMatchingWorkflow

Deletes the `MatchingWorkflow` with a given name. This operation will succeed even if a workflow with the given name does not exist.

Request Syntax

```
DELETE /matchingworkflows/workflowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow to be retrieved.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "message": "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.

message

A successful operation message.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeletePolicyStatement

Deletes the policy statement.

Request Syntax

```
DELETE /policies/arn/statementId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

arn

The ARN of the resource for which the policy need to be deleted.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

statementId

A statement identifier that differentiates the statement from others in the same policy.

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

Pattern: `[0-9A-Za-z]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
   "arn": "string",
   "policy": "string",
   "token": "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.

arn

The ARN of the resource for which the policy need to be deleted.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

policy

The resource-based policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

token

A unique identifier for the deleted policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteSchemaMapping

Deletes the SchemaMapping with a given name. This operation will succeed even if a schema with the given name does not exist. This operation will fail if there is a MatchingWorkflow object that references the SchemaMapping in the workflow's InputSourceConfig.

Request Syntax

```
DELETE /schemas/schemaName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

schemaName

The name of the schema to delete.

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

Pattern: [a-zA-Z_0-9-]*

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "message": "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.

message

A successful operation message.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GenerateMatchId

Generates or retrieves Match IDs for records using a rule-based matching workflow. When you call this operation, it processes your records against the workflow's matching rules to identify potential matches. For existing records, it retrieves their Match IDs and associated rules. For records without matches, it generates new Match IDs. The operation saves results to Amazon S3.

The processing type (`processingType`) you choose affects both the accuracy and response time of the operation. Additional charges apply for each API call, whether made through the AWS Entity Resolution console or directly via the API. The rule-based matching workflow must exist and be active before calling this operation.

Request Syntax

```
POST /matchingworkflows/workflowName/generateMatches HTTP/1.1
Content-type: application/json

{
   "processingType": "string",
   "records": [
      {
         "inputSourceARN": "string",
         "recordAttributeMap": {
            "string" : "string"
         },
         "uniqueId": "string"
      }
   ]
}
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the rule-based matching workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

processingType

The processing mode that determines how Match IDs are generated and results are saved. Each mode provides different levels of accuracy, response time, and completeness of results.

If not specified, defaults to `CONSISTENT`.

`CONSISTENT`: Performs immediate lookup and matching against all existing records, with results saved synchronously. Provides highest accuracy but slower response time.

`EVENTUAL` (shown as *Background* in the console): Performs initial match ID lookup or generation immediately, with record updates processed asynchronously in the background. Offers faster initial response time, with complete matching results available later in S3.

`EVENTUAL_NO_LOOKUP` (shown as *Quick ID generation* in the console): Generates new match IDs without checking existing matches, with updates processed asynchronously. Provides fastest response time but should only be used for records known to be unique.

Type: String

Valid Values: `CONSISTENT | EVENTUAL | EVENTUAL_NO_LOOKUP`

Required: No

records

The records to match.

Type: Array of Record objects

Array Members: Fixed number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "failedRecords": [
      {
         "errorMessage": "string",
         "inputSourceARN": "string",
         "uniqueId": "string"
      }
   ],
   "matchGroups": [
      {
         "matchId": "string",
         "matchRule": "string",
         "records": [
            {
               "inputSourceARN": "string",
               "recordId": "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.

failedRecords

The records that didn't receive a generated Match ID.

Type: Array of FailedRecord objects

matchGroups

The match groups from the generated match ID.

Type: Array of MatchGroup objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2

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

GetIdMappingJob

Returns the status, metrics, and errors (if there are any) that are associated with a job.

Request Syntax

```
GET /idmappingworkflows/workflowName/jobs/jobId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

jobId

The ID of the job.

Pattern: `[a-f0-9]{32}`

Required: Yes

workflowName

The name of the workflow.

Pattern: `[a-zA-Z_0-9-=+/]*$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "endTime": number,
```

```
   "errorDetails": {
      "errorMessage": "string"
   },
   "jobId": "string",
   "metrics": {
      "inputRecords": number,
      "recordsNotProcessed": number,
      "totalMappedRecords": number,
      "totalMappedSourceRecords": number,
      "totalMappedTargetRecords": number,
      "totalRecordsProcessed": number,
      "uniqueRecordsLoaded": number
   },
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string",
         "roleArn": "string"
      }
   ],
   "startTime": number,
   "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.

endTime

The time at which the job has finished.

Type: Timestamp

errorDetails

An object containing an error message, if there was an error.

Type: ErrorDetails object

jobId

The ID of the job.

Type: String

Pattern: `[a-f0-9]{32}`

metrics

Metrics associated with the execution, specifically total records processed, unique IDs generated, and records the execution skipped.

Type: IdMappingJobMetrics object

outputSourceConfig

A list of `OutputSource` objects.

Type: Array of IdMappingJobOutputSource objects

Array Members: Fixed number of 1 item.

startTime

The time at which the job was started.

Type: Timestamp

status

The current status of the job.

Type: String

Valid Values: `RUNNING | SUCCEEDED | FAILED | QUEUED`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetIdMappingWorkflow

Returns the `IdMappingWorkflow` with a given name, if it exists.

Request Syntax

```
GET /idmappingworkflows/workflowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "idMappingTechniques": {
      "idMappingType": "string",
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
```

```
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "recordMatchingModel": "string",
         "ruleDefinitionType": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      }
   },
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string",
         "type": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string"
      }
   ],
   "roleArn": "string",
   "tags": {
      "string" : "string"
   },
   "updatedAt": number,
   "workflowArn": "string",
   "workflowName": "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.

createdAt

The timestamp of when the workflow was created.

Type: Timestamp

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Type: IdMappingTechniques object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdMappingWorkflowInputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path` and `KMSArn`.

Type: Array of IdMappingWorkflowOutputSource objects

Array Members: Fixed number of 1 item.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Pattern: `$|^arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

updatedAt

The timestamp of when the workflow was last updated.

Type: Timestamp

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `IdMappingWorkflow` .

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetIdNamespace

Returns the `IdNamespace` with a given name, if it exists.

Request Syntax

```
GET /idnamespaces/idNamespaceName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

idNamespaceName

The name of the ID namespace.

Pattern: `[a-zA-Z_0-9-=+/]*$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "idMappingWorkflowProperties": [
      {
         "idMappingType": "string",
         "providerProperties": {
            "providerConfiguration": JSON value,
            "providerServiceArn": "string"
         },
```

```
         "ruleBasedProperties": {
            "attributeMatchingModel": "string",
            "recordMatchingModels": [ "string" ],
            "ruleDefinitionTypes": [ "string" ],
            "rules": [
               {
                  "matchingKeys": [ "string" ],
                  "ruleName": "string"
               }
            ]
         }
      }
   ],
   "idNamespaceArn": "string",
   "idNamespaceName": "string",
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "roleArn": "string",
   "tags": {
      "string" : "string"
   },
   "type": "string",
   "updatedAt": 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.

createdAt

The timestamp of when the ID namespace was created.

Type: Timestamp

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingWorkflowProperties

Determines the properties of `IdMappingWorkflow` where this `IdNamespace` can be used as a `Source` or a `Target`.

Type: Array of IdNamespaceIdMappingWorkflowProperties objects

Array Members: Fixed number of 1 item.

idNamespaceArn

The Amazon Resource Name (ARN) of the ID namespace.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})`

idNamespaceName

The name of the ID namespace.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdNamespaceInputSource objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access the resources defined in this `IdNamespace` on your behalf as part of a workflow run.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The `SOURCE` contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The `TARGET` contains a configuration of `targetId` to which all `sourceIds` will resolve to.

Type: String

Valid Values: `SOURCE | TARGET`

updatedAt

The timestamp of when the ID namespace was last updated.

Type: Timestamp

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetMatchId

Returns the corresponding Match ID of a customer record if the record has been processed in a rule-based matching workflow or ML matching workflow.

You can call this API as a dry run of an incremental load on the rule-based matching workflow.

Request Syntax

```
POST /matchingworkflows/workflowName/matches HTTP/1.1
Content-type: application/json

{
   "applyNormalization": boolean,
   "record": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

applyNormalization

Normalizes the attributes defined in the schema in the input data. For example, if an attribute has an `AttributeType` of `PHONE_NUMBER`, and the data in the input table is in a format of 1234567890, AWS Entity Resolution will normalize this field in the output to (123)-456-7890.

Type: Boolean

Required: No

record

The record to fetch the Match ID for.

Type: String to string map

Key Length Constraints: Minimum length of 0. Maximum length of 255.

Key Pattern: `[a-zA-Z_0-9- \t]*`

Value Length Constraints: Minimum length of 0. Maximum length of 255.

Value Pattern: `[a-zA-Z_0-9-./@ ()+\t]*`

Required: Yes

Response Syntax

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

{
   "matchId": "string",
   "matchRule": "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.

matchId

The unique identifiers for this group of match records.

Type: String

matchRule

The rule the record matched on.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

HTTP Status Code: 400

Examples

Example

The following example uses the `GetMatchID` API to find matches for the given record using the specified matching workflow, while applying normalization to the input data. The request sets the

applyNormalization field to true, indicating that the service should apply normalization to the input record before matching. The request body contains a record object containing the data to be matched. In this case, it includes name, email, and phone. The response from the API includes the matchId, which is the unique identifier for the matching entity record, and the matchRule, which is the rule the record matched on.

Sample Request

```
POST /matchingworkflows/customerMatchingWorkflow/matches HTTP/1.1
Host: entity-resolution.us-west-2.amazonaws.com
Content-Type: application/json
X-Amz-Date: 20241114T101530Z
Authorization: AWS4-HMAC-SHA256 Credential=AKIAIOSFODNN7EXAMPLE/20241114/us-
west-2/entity-resolution/aws4_request, SignedHeaders=content-type;host;x-amz-date,
 Signature=<signature>

{
  "applyNormalization": true,
  "record": {
    "name": "John Smith",
    "email": "john.smith@example.com",
    "phone": "+1-555-123-4567"
  }
}
```

Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
X-Amzn-RequestId: 9876zyxw-98zy-76xw-54vu-9876543210zy
Date: Thu, 14 Nov 2024 10:30:45 GMT

{
  "matchId": "491089aec7a1481cab8b492a1edf7953",
  "matchRule": "nameAndEmailMatch"
}
```

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetMatchingJob

Returns the status, metrics, and errors (if there are any) that are associated with a job.

Request Syntax

```
GET /matchingworkflows/workflowName/jobs/jobId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

jobId

The ID of the job.

Pattern: `[a-f0-9]{32}`

Required: Yes

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "endTime": number,
```

```
   "errorDetails": {
      "errorMessage": "string"
   },
   "jobId": "string",
   "metrics": {
      "inputRecords": number,
      "matchIDs": number,
      "recordsNotProcessed": number,
      "totalRecordsProcessed": number
   },
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string",
         "roleArn": "string"
      }
   ],
   "startTime": number,
   "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.

endTime

The time at which the job has finished.

Type: Timestamp

errorDetails

An object containing an error message, if there was an error.

Type: ErrorDetails object

jobId

The unique identifier of the matching job.

Type: String

Pattern: `[a-f0-9]{32}`

metrics

Metrics associated with the execution, specifically total records processed, unique IDs generated, and records the execution skipped.

Type: JobMetrics object

outputSourceConfig

A list of `OutputSource` objects.

Type: Array of JobOutputSource objects

Array Members: Fixed number of 1 item.

startTime

The time at which the job was started.

Type: Timestamp

status

The current status of the job.

Type: String

Valid Values: `RUNNING | SUCCEEDED | FAILED | QUEUED`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetMatchingWorkflow

Returns the `MatchingWorkflow` with a given name, if it exists.

Request Syntax

```
GET /matchingworkflows/workflowName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "incrementalRunConfig": {
      "incrementalRunType": "string"
   },
   "inputSourceConfig": [
      {
         "applyNormalization": boolean,
         "inputSourceARN": "string",
         "schemaName": "string"
```

```
      }
   ],
   "outputSourceConfig": [
      {
         "applyNormalization": boolean,
         "KMSArn": "string",
         "output": [
            {
               "hashed": boolean,
               "name": "string"
            }
         ],
         "outputS3Path": "string"
      }
   ],
   "resolutionTechniques": {
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "resolutionType": "string",
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "matchPurpose": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      },
      "ruleConditionProperties": {
         "rules": [
            {
               "condition": "string",
               "ruleName": "string"
            }
         ]
      }
   },
   "roleArn": "string",
```

```
    "tags": {
       "string" : "string"
    },
    "updatedAt": number,
    "workflowArn": "string",
    "workflowName": "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.

createdAt

The timestamp of when the workflow was created.

Type: Timestamp

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

incrementalRunConfig

An object which defines an incremental run type and has only `incrementalRunType` as a field.

Type: IncrementalRunConfig object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of InputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path`, `applyNormalization`, `KMSArn`, and `output`.

Type: Array of OutputSource objects

Array Members: Fixed number of 1 item.

resolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Type: ResolutionTechniques object

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf.

Type: String

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

updatedAt

The timestamp of when the workflow was last updated.

Type: Timestamp

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `MatchingWorkflow`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})`

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetPolicy

Returns the resource-based policy.

Request Syntax

```
GET /policies/arn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

arn

The Amazon Resource Name (ARN) of the resource for which the policy need to be returned.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "arn": "string",
   "policy": "string",
   "token": "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.

arn

The AWS Entity Resolution resource ARN.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

policy

The resource-based policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

token

A unique identifier for the current revision of the policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetProviderService

Returns the `ProviderService` of a given name.

Request Syntax

```
GET /providerservices/providerName/providerServiceName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

providerName

The name of the provider. This name is typically the company name.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

providerServiceName

The ARN (Amazon Resource Name) of the product that the provider service provides.

Length Constraints: Minimum length of 20. Maximum length of 255.

Pattern: `arn:(aws|aws-us-gov|aws-cn):(entityresolution):([a-z]{2}-[a-z]{1,10}-[0-9])::providerservice/([a-zA-Z0-9_-]{1,255})/([a-zA-Z0-9_-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "anonymizedOutput": boolean,
   "providerComponentSchema": {
      "providerSchemaAttributes": [
         {
            "fieldName": "string",
            "hashing": boolean,
            "subType": "string",
            "type": "string"
         }
      ],
      "schemas": [
         [ "string" ]
      ]
   },
   "providerConfigurationDefinition": JSON value,
   "providerEndpointConfiguration": { ... },
   "providerEntityOutputDefinition": JSON value,
   "providerIdNameSpaceConfiguration": {
      "description": "string",
      "providerSourceConfigurationDefinition": JSON value,
      "providerTargetConfigurationDefinition": JSON value
   },
   "providerIntermediateDataAccessConfiguration": {
      "awsAccountIds": [ "string" ],
      "requiredBucketActions": [ "string" ]
   },
   "providerJobConfiguration": JSON value,
   "providerName": "string",
   "providerServiceArn": "string",
   "providerServiceDisplayName": "string",
   "providerServiceName": "string",
   "providerServiceType": "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.

anonymizedOutput

Specifies whether output data from the provider is anonymized. A value of TRUE means the output will be anonymized and you can't relate the data that comes back from the provider to the identifying input. A value of FALSE means the output won't be anonymized and you can relate the data that comes back from the provider to your source data.

Type: Boolean

providerComponentSchema

Input schema for the provider service.

Type: ProviderComponentSchema object

providerConfigurationDefinition

The definition of the provider configuration.

Type: JSON value

providerEndpointConfiguration

The required configuration fields to use with the provider service.

Type: ProviderEndpointConfiguration object

Note: This object is a Union. Only one member of this object can be specified or returned.

providerEntityOutputDefinition

The definition of the provider entity output.

Type: JSON value

providerIdNameSpaceConfiguration

The provider configuration required for different ID namespace types.

Type: ProviderIdNameSpaceConfiguration object

providerIntermediateDataAccessConfiguration

The AWS accounts and the S3 permissions that are required by some providers to create an S3 bucket for intermediate data storage.

Type: ProviderIntermediateDataAccessConfiguration object

providerJobConfiguration

Provider service job configurations.

Type: JSON value

providerName

The name of the provider. This name is typically the company name.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

providerServiceArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the provider service.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 255.

Pattern: `arn:(aws|aws-us-gov|aws-cn):(entityresolution):([a-z]{2}-[a-z]{1,10}-[0-9])::providerservice/([a-zA-Z0-9_-]{1,255})/([a-zA-Z0-9_-]{1,255})`

providerServiceDisplayName

The display name of the provider service.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

providerServiceName

The name of the product that the provider service provides.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

providerServiceType

The type of provider service.

Type: String

Valid Values: `ASSIGNMENT | ID_MAPPING`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

GetSchemaMapping

Returns the SchemaMapping of a given name.

Request Syntax

```
GET /schemas/schemaName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

schemaName

The name of the schema to be retrieved.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "hasWorkflows": boolean,
   "mappedInputFields": [
      {
         "fieldName": "string",
         "groupName": "string",
         "hashed": boolean,
```

```
            "matchKey": "string",
            "subType": "string",
            "type": "string"
         }
      ],
      "schemaArn": "string",
      "schemaName": "string",
      "tags": {
         "string" : "string"
      },
      "updatedAt": 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.

createdAt

The timestamp of when the `SchemaMapping` was created.

Type: Timestamp

description

A description of the schema.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

hasWorkflows

Specifies whether the schema mapping has been applied to a workflow.

Type: Boolean

mappedInputFields

A list of `MappedInputFields`. Each `MappedInputField` corresponds to a column the source data table, and contains column name plus additional information AWS Entity Resolution uses for matching.

Type: Array of SchemaInputAttribute objects

Array Members: Minimum number of 2 items. Maximum number of 35 items.

schemaArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the SchemaMapping.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(schemamapping/[a-zA-Z_0-9-]{1,255})`

schemaName

The name of the schema.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

updatedAt

The timestamp of when the `SchemaMapping` was last updated.

Type: Timestamp

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

ListIdMappingJobs

Lists all ID mapping jobs for a given workflow.

Request Syntax

```
GET /idmappingworkflows/workflowName/jobs?maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Minimum value of 1. Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

workflowName

The name of the workflow to be retrieved.

Pattern: `[a-zA-Z_0-9-=+/]*$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "jobs": [
      {
         "endTime": number,
         "jobId": "string",
         "startTime": number,
         "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.

jobs

A list of `JobSummary` objects.

Type: Array of JobSummary objects

nextToken

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

ListIdMappingWorkflows

Returns a list of all the `IdMappingWorkflows` that have been created for an AWS account.

Request Syntax

```
GET /idmappingworkflows?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "workflowSummaries": [
      {
         "createdAt": number,
         "updatedAt": number,
```

```
            "workflowArn": "string",
            "workflowName": "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

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

workflowSummaries

A list of `IdMappingWorkflowSummary` objects.

Type: Array of IdMappingWorkflowSummary objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListIdNamespaces

Returns a list of all ID namespaces.

Request Syntax

```
GET /idnamespaces?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of `IdNamespace` objects returned per page.

Valid Range: Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "idNamespaceSummaries": [
      {
         "createdAt": number,
         "description": "string",
```

```
         "idMappingWorkflowProperties": [
            {
               "idMappingType": "string"
            }
         ],
         "idNamespaceArn": "string",
         "idNamespaceName": "string",
         "type": "string",
         "updatedAt": number
      }
   ],
   "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.

idNamespaceSummaries

A list of `IdNamespaceSummaries` objects.

Type: Array of IdNamespaceSummary objects

nextToken

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListMatchingJobs

Lists all jobs for a given workflow.

Request Syntax

```
GET /matchingworkflows/workflowName/jobs?maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Minimum value of 1. Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

workflowName

The name of the workflow to be retrieved.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "jobs": [
      {
         "endTime": number,
         "jobId": "string",
         "startTime": number,
         "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.

jobs

A list of `JobSummary` objects, each of which contain the ID, status, start time, and end time of a job.

Type: Array of JobSummary objects

nextToken

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin

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

ListMatchingWorkflows

Returns a list of all the `MatchingWorkflows` that have been created for an AWS account.

Request Syntax

```
GET /matchingworkflows?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "workflowSummaries": [
      {
         "createdAt": number,
         "resolutionType": "string",
```

```
            "updatedAt": number,
            "workflowArn": "string",
            "workflowName": "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

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

workflowSummaries

A list of `MatchingWorkflowSummary` objects, each of which contain the fields `workflowName`, `workflowArn`, `resolutionType`, `createdAt`, and `updatedAt`.

Type: Array of MatchingWorkflowSummary objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListProviderServices

Returns a list of all the `ProviderServices` that are available in this AWS Region.

Request Syntax

```
GET /providerservices?
maxResults=maxResults&nextToken=nextToken&providerName=providerName HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Minimum value of 15. Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

providerName

The name of the provider. This name is typically the company name.

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

Pattern: `[a-zA-Z_0-9-]*`

Request Body

The request does not have a request body.

Response Syntax

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

```
{
   "nextToken": "string",
   "providerServiceSummaries": [
      {
         "providerName": "string",
         "providerServiceArn": "string",
         "providerServiceDisplayName": "string",
         "providerServiceName": "string",
         "providerServiceType": "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

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

providerServiceSummaries

A list of `ProviderServices` objects.

Type: Array of ProviderServiceSummary objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListSchemaMappings

Returns a list of all the SchemaMappings that have been created for an AWS account.

Request Syntax

```
GET /schemas?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum number of objects returned per page.

Valid Range: Maximum value of 25.

nextToken

The pagination token from the previous API call.

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: [a-zA-Z_0-9-=+/]*

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "schemaList": [
      {
         "createdAt": number,
         "hasWorkflows": boolean,
```

```
            "schemaArn": "string",
            "schemaName": "string",
            "updatedAt": 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

The pagination token from the previous API call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `[a-zA-Z_0-9-=+/]*`

schemaList

A list of `SchemaMappingSummary` objects, each of which contain the fields `SchemaName`, `SchemaArn`, `CreatedAt`, `UpdatedAt`.

Type: Array of SchemaMappingSummary objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

ListTagsForResource

Displays the tags associated with an AWS Entity Resolution resource. In AWS Entity Resolution, `SchemaMapping`, and `MatchingWorkflow` can be tagged.

Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource for which you want to view tags.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "tags": {
      "string" : "string"
   }
}
```

Response Elements

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

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

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Errors

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

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

PutPolicy

Updates the resource-based policy.

Request Syntax

```
PUT /policies/arn HTTP/1.1
Content-type: application/json

{
   "policy": "string",
   "token": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

arn

The Amazon Resource Name (ARN) of the resource for which the policy needs to be updated.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request accepts the following data in JSON format.

policy

The resource-based policy.

> **Important**
>
> If you set the value of the `effect` parameter in the `policy` to `Deny` for the `PutPolicy` operation, you must also set the value of the `effect` parameter to `Deny` for the `AddPolicyStatement` operation.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

Required: Yes

token

A unique identifier for the current revision of the policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}`

Required: No

Response Syntax

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

{
   "arn": "string",
   "policy": "string",
   "token": "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.

arn

The AWS Entity Resolution resource ARN.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

policy

The resource-based policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 40960.

token

A unique identifier for the current revision of the policy.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-fA-F0-9]{8}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{4}-[a-fA-F0-9]{12}`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

StartIdMappingJob

Starts the `IdMappingJob` of a workflow. The workflow must have previously been created using the `CreateIdMappingWorkflow` endpoint.

Request Syntax

```
POST /idmappingworkflows/workflowName/jobs HTTP/1.1
Content-type: application/json

{
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string",
         "roleArn": "string"
      }
   ]
}
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the ID mapping job to be retrieved.

Pattern: `[a-zA-Z_0-9-=+/]*$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request accepts the following data in JSON format.

outputSourceConfig

A list of `OutputSource` objects.

Type: Array of IdMappingJobOutputSource objects

Array Members: Fixed number of 1 item.

Required: No

Response Syntax

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

{
   "jobId": "string",
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string",
         "roleArn": "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.

jobId

The ID of the job.

Type: String

Pattern: `[a-f0-9]{32}`

outputSourceConfig

A list of `OutputSource` objects.

Type: Array of IdMappingJobOutputSource objects

Array Members: Fixed number of 1 item.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

StartMatchingJob

Starts the `MatchingJob` of a workflow. The workflow must have previously been created using the `CreateMatchingWorkflow` endpoint.

Request Syntax

```
POST /matchingworkflows/workflowName/jobs HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the matching job to be retrieved.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "jobId": "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.

jobId

The ID of the job.

Type: String

Pattern: `[a-f0-9]{32}`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

ExceedsLimitException

The request was rejected because it attempted to create resources beyond the current AWS Entity Resolution account limits. The error message describes the limit exceeded.

HTTP Status Code: 402

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

TagResource

Assigns one or more tags (key-value pairs) to the specified AWS Entity Resolution resource. Tags can help you organize and categorize your resources. You can also use them to scope user permissions by granting a user permission to access or change only resources with certain tag values. In AWS Entity Resolution, `SchemaMapping` and `MatchingWorkflow` can be tagged. Tags don't have any semantic meaning to AWS and are interpreted strictly as strings of characters. You can use the `TagResource` action with a resource that already has tags. If you specify a new tag key, this tag is appended to the list of tags associated with the resource. If you specify a tag key that is already associated with the resource, the new tag value that you specify replaces the previous value for that tag.

Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json

{
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource for which you want to view tags.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

The tags used to organize, track, or control access for this resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

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

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UntagResource

Removes one or more tags from the specified AWS Entity Resolution resource. In AWS Entity Resolution, `SchemaMapping`, and `MatchingWorkflow` can be tagged.

Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource for which you want to untag.

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:((schemamapping|matchingworkflow|idmappingworkflow|idnamespace)/[a-zA-Z_0-9-]{1,255})`

Required: Yes

tagKeys

The list of tag keys to remove from the resource.

Array Members: Minimum number of 0 items. Maximum number of 200 items.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateIdMappingWorkflow

Updates an existing `IdMappingWorkflow`. This method is identical to CreateIdMappingWorkflow, except it uses an HTTP PUT request instead of a POST request, and the `IdMappingWorkflow` must already exist for the method to succeed.

> **Important**
>
> Incremental processing is not supported for ID mapping workflows.

Request Syntax

```
PUT /idmappingworkflows/workflowName HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "idMappingTechniques": {
      "idMappingType": "string",
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "recordMatchingModel": "string",
         "ruleDefinitionType": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      }
   },
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
```

```
            "schemaName": "string",
            "type": "string"
         }
      ],
      "outputSourceConfig": [
         {
            "KMSArn": "string",
            "outputS3Path": "string"
         }
      ],
      "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

idMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Type: IdMappingTechniques object

Required: Yes

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdMappingWorkflowInputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: Yes

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path` and `KMSArn`.

Type: Array of IdMappingWorkflowOutputSource objects

Array Members: Fixed number of 1 item.

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Pattern: `$|^arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: No

Response Syntax

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

{
   "description": "string",
   "idMappingTechniques": {
```

```
      "idMappingType": "string",
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "recordMatchingModel": "string",
         "ruleDefinitionType": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      }
   },
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string",
         "type": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "KMSArn": "string",
         "outputS3Path": "string"
      }
   ],
   "roleArn": "string",
   "workflowArn": "string",
   "workflowName": "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

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Type: IdMappingTechniques object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdMappingWorkflowInputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path` and `KMSArn`.

Type: Array of IdMappingWorkflowOutputSource objects

Array Members: Fixed number of 1 item.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 512.

Pattern: `$|^arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

workflowArn

The Amazon Resource Name (ARN) of the workflow role. AWS Entity Resolution assumes this role to access AWS resources on your behalf.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateIdNamespace

Updates an existing ID namespace.

Request Syntax

```
PUT /idnamespaces/idNamespaceName HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "idMappingWorkflowProperties": [
      {
         "idMappingType": "string",
         "providerProperties": {
            "providerConfiguration": JSON value,
            "providerServiceArn": "string"
         },
         "ruleBasedProperties": {
            "attributeMatchingModel": "string",
            "recordMatchingModels": [ "string" ],
            "ruleDefinitionTypes": [ "string" ],
            "rules": [
               {
                  "matchingKeys": [ "string" ],
                  "ruleName": "string"
               }
            ]
         }
      }
   ],
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

idNamespaceName

The name of the ID namespace.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

idMappingWorkflowProperties

Determines the properties of `IdMappingWorkflow` where this `IdNamespace` can be used as a `Source` or a `Target`.

Type: Array of IdNamespaceIdMappingWorkflowProperties objects

Array Members: Fixed number of 1 item.

Required: No

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdNamespaceInputSource objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

Required: No

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access the resources defined in this `IdNamespace` on your behalf as part of a workflow run.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: No

Response Syntax

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

{
   "createdAt": number,
   "description": "string",
   "idMappingWorkflowProperties": [
      {
         "idMappingType": "string",
         "providerProperties": {
            "providerConfiguration": JSON value,
            "providerServiceArn": "string"
         },
         "ruleBasedProperties": {
            "attributeMatchingModel": "string",
            "recordMatchingModels": [ "string" ],
            "ruleDefinitionTypes": [ "string" ],
            "rules": [
               {
                  "matchingKeys": [ "string" ],
                  "ruleName": "string"
               }
```

```
            ]
         }
      }
   ],
   "idNamespaceArn": "string",
   "idNamespaceName": "string",
   "inputSourceConfig": [
      {
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "roleArn": "string",
   "type": "string",
   "updatedAt": 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.

createdAt

The timestamp of when the ID namespace was created.

Type: Timestamp

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

idMappingWorkflowProperties

Determines the properties of `IdMappingWorkflow` where this `IdNamespace` can be used as a `Source` or a `Target`.

Type: Array of IdNamespaceIdMappingWorkflowProperties objects

Array Members: Fixed number of 1 item.

idNamespaceArn

The Amazon Resource Name (ARN) of the ID namespace.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})`

idNamespaceName

The name of the ID namespace.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of IdNamespaceInputSource objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access the resources defined in this `IdNamespace` on your behalf as part of a workflow run.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The `SOURCE` contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The TARGET contains a configuration of `targetId` to which all `sourceIds` will resolve to.

Type: String

Valid Values: SOURCE | TARGET

updatedAt

The timestamp of when the ID namespace was last updated.

Type: Timestamp

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateMatchingWorkflow

Updates an existing matching workflow. The workflow must already exist for this operation to succeed.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Request Syntax

```
PUT /matchingworkflows/workflowName HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "incrementalRunConfig": {
      "incrementalRunType": "string"
   },
   "inputSourceConfig": [
      {
         "applyNormalization": boolean,
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "applyNormalization": boolean,
         "KMSArn": "string",
         "output": [
            {
               "hashed": boolean,
               "name": "string"
            }
         ],
         "outputS3Path": "string"
      }
   ],
   "resolutionTechniques": {
```

```
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "resolutionType": "string",
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "matchPurpose": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      },
      "ruleConditionProperties": {
         "rules": [
            {
               "condition": "string",
               "ruleName": "string"
            }
         ]
      }
   },
   "roleArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

workflowName

The name of the workflow to be retrieved.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

description

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

incrementalRunConfig

Optional. An object that defines the incremental run type. This object contains only the `incrementalRunType` field, which appears as "Automatic" in the console.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Type: IncrementalRunConfig object

Required: No

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of InputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: Yes

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path`, `applyNormalization`, `KMSArn`, and `output`.

Type: Array of OutputSource objects

Array Members: Fixed number of 1 item.

Required: Yes

resolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Type: ResolutionTechniques object

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

Required: Yes

Response Syntax

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

{
   "description": "string",
   "incrementalRunConfig": {
      "incrementalRunType": "string"
   },
   "inputSourceConfig": [
      {
         "applyNormalization": boolean,
         "inputSourceARN": "string",
         "schemaName": "string"
      }
   ],
   "outputSourceConfig": [
      {
         "applyNormalization": boolean,
         "KMSArn": "string",
         "output": [
```

```
            {
               "hashed": boolean,
               "name": "string"
            }
         ],
         "outputS3Path": "string"
      }
   ],
   "resolutionTechniques": {
      "providerProperties": {
         "intermediateSourceConfiguration": {
            "intermediateS3Path": "string"
         },
         "providerConfiguration": JSON value,
         "providerServiceArn": "string"
      },
      "resolutionType": "string",
      "ruleBasedProperties": {
         "attributeMatchingModel": "string",
         "matchPurpose": "string",
         "rules": [
            {
               "matchingKeys": [ "string" ],
               "ruleName": "string"
            }
         ]
      },
      "ruleConditionProperties": {
         "rules": [
            {
               "condition": "string",
               "ruleName": "string"
            }
         ]
      }
   },
   "roleArn": "string",
   "workflowName": "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

A description of the workflow.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

incrementalRunConfig

An object which defines an incremental run type and has only `incrementalRunType` as a field.

Type: IncrementalRunConfig object

inputSourceConfig

A list of `InputSource` objects, which have the fields `InputSourceARN` and `SchemaName`.

Type: Array of InputSource objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

outputSourceConfig

A list of `OutputSource` objects, each of which contains fields `outputS3Path`, `applyNormalization`, `KMSArn`, and `output`.

Type: Array of OutputSource objects

Array Members: Fixed number of 1 item.

resolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Type: ResolutionTechniques object

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to create resources on your behalf as part of workflow execution.

Type: String

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

UpdateSchemaMapping

Updates a schema mapping.

> **Note**
>
> A schema is immutable if it is being used by a workflow. Therefore, you can't update a schema mapping if it's associated with a workflow.

Request Syntax

```
PUT /schemas/schemaName HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "mappedInputFields": [
      {
         "fieldName": "string",
         "groupName": "string",
         "hashed": boolean,
         "matchKey": "string",
         "subType": "string",
         "type": "string"
      }
   ]
}
```

URI Request Parameters

The request uses the following URI parameters.

schemaName

The name of the schema. There can't be multiple `SchemaMappings` with the same name.

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

Request Body

The request accepts the following data in JSON format.

description

A description of the schema.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

mappedInputFields

A list of `MappedInputFields`. Each `MappedInputField` corresponds to a column the source data table, and contains column name plus additional information that AWS Entity Resolution uses for matching.

Type: Array of SchemaInputAttribute objects

Array Members: Minimum number of 2 items. Maximum number of 35 items.

Required: Yes

Response Syntax

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

{
   "description": "string",
   "mappedInputFields": [
      {
         "fieldName": "string",
         "groupName": "string",
         "hashed": boolean,
         "matchKey": "string",
         "subType": "string",
```

```
            "type": "string"
        }
    ],
    "schemaArn": "string",
    "schemaName": "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

A description of the schema.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

mappedInputFields

A list of `MappedInputFields`. Each `MappedInputField` corresponds to a column the source data table, and contains column name plus additional information that AWS Entity Resolution uses for matching.

Type: Array of SchemaInputAttribute objects

Array Members: Minimum number of 2 items. Maximum number of 35 items.

schemaArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `SchemaMapping`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(schemamapping/[a-zA-Z_0-9-]{1,255})`

schemaName

The name of the schema.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The request could not be processed because of conflict in the current state of the resource. Example: Workflow already exists, Schema already exists, Workflow is currently running, etc.

HTTP Status Code: 400

InternalServerException

This exception occurs when there is an internal failure in the AWS Entity Resolution service.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 429

ValidationException

The input fails to satisfy the constraints specified by AWS Entity Resolution.

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 v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

Data Types

The AWS EntityResolution 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:

- DeletedUniqueId
- DeleteUniqueIdError
- ErrorDetails
- FailedRecord
- IdMappingJobMetrics
- IdMappingJobOutputSource
- IdMappingRuleBasedProperties
- IdMappingTechniques
- IdMappingWorkflowInputSource
- IdMappingWorkflowOutputSource
- IdMappingWorkflowSummary
- IdNamespaceIdMappingWorkflowMetadata
- IdNamespaceIdMappingWorkflowProperties
- IdNamespaceInputSource
- IdNamespaceSummary
- IncrementalRunConfig
- InputSource
- IntermediateSourceConfiguration
- JobMetrics
- JobOutputSource

- JobSummary
- MatchedRecord
- MatchGroup
- MatchingWorkflowSummary
- NamespaceProviderProperties
- NamespaceRuleBasedProperties
- OutputAttribute
- OutputSource
- ProviderComponentSchema
- ProviderEndpointConfiguration
- ProviderIdNameSpaceConfiguration
- ProviderIntermediateDataAccessConfiguration
- ProviderMarketplaceConfiguration
- ProviderProperties
- ProviderSchemaAttribute
- ProviderServiceSummary
- Record
- ResolutionTechniques
- Rule
- RuleBasedProperties
- RuleCondition
- RuleConditionProperties
- SchemaInputAttribute
- SchemaMappingSummary

DeletedUniqueId

The deleted unique ID.

Contents

uniqueId

The unique ID of the deleted item.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 780.

Pattern: `[a-zA-Z_0-9-+=/,]*`

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 Java V2
- AWS SDK for Ruby V3

DeleteUniqueIdError

The Delete Unique Id error.

Contents

errorType

The error type for the batch delete unique ID operation.

Type: String

Valid Values: `SERVICE_ERROR | VALIDATION_ERROR`

Required: Yes

uniqueId

The unique ID that could not be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 780.

Pattern: `[a-zA-Z_0-9-+=/,]*`

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 Java V2
- AWS SDK for Ruby V3

ErrorDetails

An object containing an error message, if there was an error.

Contents

errorMessage

The error message from the job, if there is one.

Type: String

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

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

FailedRecord

The record that didn't generate a Match ID.

Contents

errorMessage

The error message for the record that didn't generate a Match ID.

Type: String

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

Required: Yes

inputSourceARN

The input source ARN of the record that didn't generate a Match ID.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

uniqueId

The unique ID of the record that didn't generate a Match ID.

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 Java V2
- AWS SDK for Ruby V3

IdMappingJobMetrics

An object that contains metrics about an ID mapping job, including counts of input records, processed records, and mapped records between source and target identifiers.

Contents

inputRecords

The total number of records that were input for processing.

Type: Integer

Required: No

recordsNotProcessed

The total number of records that did not get processed.

Type: Integer

Required: No

totalMappedRecords

The total number of records that were mapped.

Type: Integer

Required: No

totalMappedSourceRecords

The total number of mapped source records.

Type: Integer

Required: No

totalMappedTargetRecords

The total number of distinct mapped target records.

Type: Integer

Required: No

totalRecordsProcessed

The total number of records that were processed.

Type: Integer

Required: No

uniqueRecordsLoaded

The number of records remaining after loading and aggregating duplicate records. Duplicates are determined by the field marked as UNIQUE_ID in your schema mapping - records sharing the same value in this field are considered duplicates. For example, if you specified "customer_id" as a UNIQUE_ID field and had three records with the same customer_id value, they would count as one unique record in this metric.

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 Java V2
- AWS SDK for Ruby V3

IdMappingJobOutputSource

An object containing `KMSArn`, `outputS3Path`, and `roleARN`.

Contents

outputS3Path

The S3 path to which AWS Entity Resolution will write the output table.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/.*)?`

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf as part of workflow execution.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: Yes

KMSArn

Customer AWS KMS ARN for encryption at rest. If not provided, system will use an AWS Entity Resolution managed KMS key.

Type: String

Pattern: `arn:aws:kms:.*:[0-9]+:.*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IdMappingRuleBasedProperties

An object that defines the list of matching rules to run in an ID mapping workflow.

Contents

attributeMatchingModel

The comparison type. You can either choose `ONE_TO_ONE` or `MANY_TO_MANY` as the `attributeMatchingModel`.

If you choose `ONE_TO_ONE`, the system can only match attributes if the sub-types are an exact match. For example, for the `Email` attribute type, the system will only consider it a match if the value of the `Email` field of Profile A matches the value of the `Email` field of Profile B.

If you choose `MANY_TO_MANY`, the system can match attributes across the sub-types of an attribute type. For example, if the value of the `Email` field of Profile A matches the value of the `BusinessEmail` field of Profile B, the two profiles are matched on the `Email` attribute type.

Type: String

Valid Values: `ONE_TO_ONE | MANY_TO_MANY`

Required: Yes

recordMatchingModel

The type of matching record that is allowed to be used in an ID mapping workflow.

If the value is set to `ONE_SOURCE_TO_ONE_TARGET`, only one record in the source can be matched to the same record in the target.

If the value is set to `MANY_SOURCE_TO_ONE_TARGET`, multiple records in the source can be matched to one record in the target.

Type: String

Valid Values: `ONE_SOURCE_TO_ONE_TARGET | MANY_SOURCE_TO_ONE_TARGET`

Required: Yes

ruleDefinitionType

The set of rules you can use in an ID mapping workflow. The limitations specified for the source or target to define the match rules must be compatible.

Type: String

Valid Values: `SOURCE | TARGET`

Required: Yes

rules

The rules that can be used for ID mapping.

Type: Array of Rule objects

Array Members: Minimum number of 1 item. Maximum number of 25 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 Java V2
- AWS SDK for Ruby V3

IdMappingTechniques

An object which defines the ID mapping technique and any additional configurations.

Contents

idMappingType

The type of ID mapping.

Type: String

Valid Values: `PROVIDER | RULE_BASED`

Required: Yes

providerProperties

An object which defines any additional configurations required by the provider service.

Type: ProviderProperties object

Required: No

ruleBasedProperties

An object which defines any additional configurations required by rule-based matching.

Type: IdMappingRuleBasedProperties 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 Java V2
- AWS SDK for Ruby V3

IdMappingWorkflowInputSource

An object containing `inputSourceARN`, `schemaName`, and `type`.

Contents

inputSourceARN

An AWS Glue table Amazon Resource Name (ARN) or a matching workflow ARN for the input source table.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

schemaName

The name of the schema to be retrieved.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: No

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The `SOURCE` contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The `TARGET` contains a configuration of `targetId` which all `sourceIds` will resolve to.

Type: String

Valid Values: SOURCE | TARGET

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IdMappingWorkflowOutputSource

The output source for the ID mapping workflow.

Contents

outputS3Path

The S3 path to which AWS Entity Resolution will write the output table.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/.*)?`

Required: Yes

KMSArn

Customer AWS KMS ARN for encryption at rest. If not provided, system will use an AWS Entity Resolution managed KMS key.

Type: String

Pattern: `arn:aws:kms:.*:[0-9]+:.*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IdMappingWorkflowSummary

A list of `IdMappingWorkflowSummary` objects, each of which contain the fields `WorkflowName`, `WorkflowArn`, `CreatedAt`, and `UpdatedAt`.

Contents

createdAt

The timestamp of when the workflow was created.

Type: Timestamp

Required: Yes

updatedAt

The timestamp of when the workflow was last updated.

Type: Timestamp

Required: Yes

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `IdMappingWorkflow`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idmappingworkflow/[a-zA-Z_0-9-]{1,255})`

Required: Yes

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

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 Java V2
- AWS SDK for Ruby V3

IdNamespaceIdMappingWorkflowMetadata

The settings for the ID namespace for the ID mapping workflow job.

Contents

idMappingType

The type of ID mapping.

Type: String

Valid Values: `PROVIDER | RULE_BASED`

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 Java V2
- AWS SDK for Ruby V3

IdNamespaceIdMappingWorkflowProperties

An object containing `idMappingType`, `providerProperties`, and `ruleBasedProperties`.

Contents

idMappingType

The type of ID mapping.

Type: String

Valid Values: `PROVIDER | RULE_BASED`

Required: Yes

providerProperties

An object which defines any additional configurations required by the provider service.

Type: NamespaceProviderProperties object

Required: No

ruleBasedProperties

An object which defines any additional configurations required by rule-based matching.

Type: NamespaceRuleBasedProperties 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 Java V2
- AWS SDK for Ruby V3

IdNamespaceInputSource

An object containing `inputSourceARN` and `schemaName`.

Contents

inputSourceARN

An AWS Glue table Amazon Resource Name (ARN) or a matching workflow ARN for the input source table.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

schemaName

The name of the schema.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2

- AWS SDK for Ruby V3

IdNamespaceSummary

A summary of ID namespaces.

Contents

createdAt

The timestamp of when the ID namespace was created.

Type: Timestamp

Required: Yes

idNamespaceArn

The Amazon Resource Name (ARN) of the ID namespace.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})`

Required: Yes

idNamespaceName

The name of the ID namespace.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

type

The type of ID namespace. There are two types: `SOURCE` and `TARGET`.

The `SOURCE` contains configurations for `sourceId` data that will be processed in an ID mapping workflow.

The `TARGET` contains a configuration of `targetId` which all `sourceIds` will resolve to.

Type: String

Valid Values: SOURCE | TARGET

Required: Yes

updatedAt

The timestamp of when the ID namespace was last updated.

Type: Timestamp

Required: Yes

description

The description of the ID namespace.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: No

idMappingWorkflowProperties

An object which defines any additional configurations required by the ID mapping workflow.

Type: Array of IdNamespaceIdMappingWorkflowMetadata objects

Array Members: Fixed number of 1 item.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

IncrementalRunConfig

Optional. An object that defines the incremental run type. This object contains only the `incrementalRunType` field, which appears as "Automatic" in the console.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Contents

incrementalRunType

The type of incremental run. The only valid value is `IMMEDIATE`. This appears as "Automatic" in the console.

> **Important**
>
> For workflows where `resolutionType` is `ML_MATCHING` or `PROVIDER`, incremental processing is not supported.

Type: String

Valid Values: `IMMEDIATE`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

InputSource

An object containing `inputSourceARN`, `schemaName`, and `applyNormalization`.

Contents

inputSourceARN

An AWS Glue table Amazon Resource Name (ARN) for the input source table.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

schemaName

The name of the schema to be retrieved.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

applyNormalization

Normalizes the attributes defined in the schema in the input data. For example, if an attribute has an `AttributeType` of `PHONE_NUMBER`, and the data in the input table is in a format of 1234567890, AWS Entity Resolution will normalize this field in the output to (123)-456-7890.

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 Java V2
- AWS SDK for Ruby V3

IntermediateSourceConfiguration

The Amazon S3 location that temporarily stores your data while it processes. Your information won't be saved permanently.

Contents

intermediateS3Path

The Amazon S3 location (bucket and prefix). For example: `s3://provider_bucket/DOC-EXAMPLE-BUCKET`

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/.*)?`

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 Java V2
- AWS SDK for Ruby V3

JobMetrics

An object containing `inputRecords`, `totalRecordsProcessed`, `matchIDs`, and `recordsNotProcessed`.

Contents

inputRecords

The total number of input records.

Type: Integer

Required: No

matchIDs

The total number of `matchID`s generated.

Type: Integer

Required: No

recordsNotProcessed

The total number of records that did not get processed.

Type: Integer

Required: No

totalRecordsProcessed

The total number of records processed.

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 Java V2
- AWS SDK for Ruby V3

JobOutputSource

An object containing `KMSArn`, `outputS3Path`, and `roleArn`.

Contents

outputS3Path

The S3 path to which AWS Entity Resolution will write the output table.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/.*)?`

Required: Yes

roleArn

The Amazon Resource Name (ARN) of the IAM role. AWS Entity Resolution assumes this role to access AWS resources on your behalf as part of workflow execution.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 512.

Pattern: `arn:aws:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_/]+`

Required: Yes

KMSArn

Customer AWS KMS ARN for encryption at rest. If not provided, system will use an AWS Entity Resolution managed KMS key.

Type: String

Pattern: `arn:aws:kms:.*:[0-9]+:.*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

JobSummary

An object containing the `jobId`, `status`, `startTime`, and `endTime` of a job.

Contents

jobId

The ID of the job.

Type: String

Pattern: `[a-f0-9]{32}`

Required: Yes

startTime

The time at which the job was started.

Type: Timestamp

Required: Yes

status

The current status of the job.

Type: String

Valid Values: `RUNNING | SUCCEEDED | FAILED | QUEUED`

Required: Yes

endTime

The time at which the job has finished.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MatchedRecord

The matched record.

Contents

inputSourceARN

The input source ARN of the matched record.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

recordId

The record ID of the matched record.

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 Java V2
- AWS SDK for Ruby V3

MatchGroup

The match group.

Contents

matchId

The match ID.

Type: String

Required: Yes

matchRule

The match rule of the match group.

Type: String

Required: Yes

records

The matched records.

Type: Array of MatchedRecord objects

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

MatchingWorkflowSummary

A list of `MatchingWorkflowSummary` objects, each of which contain the fields `workflowName`, `workflowArn`, `resolutionType`, `createdAt`, `updatedAt`.

Contents

createdAt

The timestamp of when the workflow was created.

Type: Timestamp

Required: Yes

resolutionType

The method that has been specified for data matching, either using matching provided by AWS Entity Resolution or through a provider service.

Type: String

Valid Values: `RULE_MATCHING | ML_MATCHING | PROVIDER`

Required: Yes

updatedAt

The timestamp of when the workflow was last updated.

Type: Timestamp

Required: Yes

workflowArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `MatchingWorkflow`.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})`

Required: Yes

workflowName

The name of the workflow.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

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 Java V2
- AWS SDK for Ruby V3

NamespaceProviderProperties

An object containing `providerConfiguration` and `providerServiceArn`.

Contents

providerServiceArn

The Amazon Resource Name (ARN) of the provider service.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 255.

Pattern: `arn:(aws|aws-us-gov|aws-cn):(entityresolution):([a-z]{2}-[a-z]{1,10}-[0-9])::providerservice/([a-zA-Z0-9_-]{1,255})/([a-zA-Z0-9_-]{1,255})`

Required: Yes

providerConfiguration

An object which defines any additional configurations required by the provider service.

Type: JSON value

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

NamespaceRuleBasedProperties

The rule-based properties of an ID namespace. These properties define how the ID namespace can be used in an ID mapping workflow.

Contents

attributeMatchingModel

The comparison type. You can either choose `ONE_TO_ONE` or `MANY_TO_MANY` as the `attributeMatchingModel`.

If you choose `ONE_TO_ONE`, the system can only match attributes if the sub-types are an exact match. For example, for the `Email` attribute type, the system will only consider it a match if the value of the `Email` field of Profile A matches the value of the `Email` field of Profile B.

If you choose `MANY_TO_MANY`, the system can match attributes across the sub-types of an attribute type. For example, if the value of the `Email` field of Profile A matches the value of `BusinessEmail` field of Profile B, the two profiles are matched on the `Email` attribute type.

Type: String

Valid Values: `ONE_TO_ONE | MANY_TO_MANY`

Required: No

recordMatchingModels

The type of matching record that is allowed to be used in an ID mapping workflow.

If the value is set to `ONE_SOURCE_TO_ONE_TARGET`, only one record in the source is matched to one record in the target.

If the value is set to `MANY_SOURCE_TO_ONE_TARGET`, all matching records in the source are matched to one record in the target.

Type: Array of strings

Valid Values: `ONE_SOURCE_TO_ONE_TARGET | MANY_SOURCE_TO_ONE_TARGET`

Required: No

ruleDefinitionTypes

The sets of rules you can use in an ID mapping workflow. The limitations specified for the source and target must be compatible.

Type: Array of strings

Valid Values: `SOURCE | TARGET`

Required: No

rules

The rules for the ID namespace.

Type: Array of Rule objects

Array Members: Minimum number of 1 item. Maximum number of 25 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 Java V2
- AWS SDK for Ruby V3

OutputAttribute

A list of `OutputAttribute` objects, each of which have the fields `Name` and `Hashed`. Each of these objects selects a column to be included in the output table, and whether the values of the column should be hashed.

Contents

name

A name of a column to be written to the output. This must be an `InputField` name in the schema mapping.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: Yes

hashed

Enables the ability to hash the column values in the output.

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 Java V2
- AWS SDK for Ruby V3

OutputSource

A list of `OutputAttribute` objects, each of which have the fields `Name` and `Hashed`. Each of these objects selects a column to be included in the output table, and whether the values of the column should be hashed.

Contents

output

A list of `OutputAttribute` objects, each of which have the fields `Name` and `Hashed`. Each of these objects selects a column to be included in the output table, and whether the values of the column should be hashed.

Type: Array of OutputAttribute objects

Array Members: Minimum number of 0 items. Maximum number of 750 items.

Required: Yes

outputS3Path

The S3 path to which AWS Entity Resolution will write the output table.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/.*)?`

Required: Yes

applyNormalization

Normalizes the attributes defined in the schema in the input data. For example, if an attribute has an `AttributeType` of `PHONE_NUMBER`, and the data in the input table is in a format of 1234567890, AWS Entity Resolution will normalize this field in the output to (123)-456-7890.

Type: Boolean

Required: No

KMSArn

Customer KMS ARN for encryption at rest. If not provided, system will use an AWS Entity Resolution managed KMS key.

Type: String

Pattern: `arn:aws:kms:.*:[0-9]+:.*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProviderComponentSchema

The input schema supported by provider service.

Contents

providerSchemaAttributes

The provider schema attributes.

Type: Array of ProviderSchemaAttribute objects

Required: No

schemas

Input schema for the provider service.

Type: Array of arrays 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 Java V2
- AWS SDK for Ruby V3

ProviderEndpointConfiguration

The required configuration fields to use with the provider service.

Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

marketplaceConfiguration

The identifiers of the provider service, from AWS Data Exchange.

Type: ProviderMarketplaceConfiguration 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 Java V2
- AWS SDK for Ruby V3

ProviderIdNameSpaceConfiguration

The provider configuration required for different ID namespace types.

Contents

description

The description of the ID namespace.

Type: String

Required: No

providerSourceConfigurationDefinition

Configurations required for the source ID namespace.

Type: JSON value

Required: No

providerTargetConfigurationDefinition

Configurations required for the target ID namespace.

Type: JSON value

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProviderIntermediateDataAccessConfiguration

The required configuration fields to give intermediate access to a provider service.

Contents

awsAccountIds

The AWS account that provider can use to read or write data into the customer's intermediate S3 bucket.

Type: Array of strings

Pattern: `\d{12}`

Required: No

requiredBucketActions

The S3 bucket actions that the provider requires permission for.

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 Java V2
- AWS SDK for Ruby V3

ProviderMarketplaceConfiguration

The identifiers of the provider service, from AWS Data Exchange.

Contents

assetId

The asset ID on AWS Data Exchange.

Type: String

Required: Yes

dataSetId

The dataset ID on AWS Data Exchange.

Type: String

Required: Yes

listingId

The listing ID on AWS Data Exchange.

Type: String

Required: Yes

revisionId

The revision ID on AWS Data Exchange.

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 Java V2
- AWS SDK for Ruby V3

ProviderProperties

An object containing the `providerServiceARN`, `intermediateSourceConfiguration`, and `providerConfiguration`.

Contents

providerServiceArn

The ARN of the provider service.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 255.

Pattern: `arn:(aws|aws-us-gov|aws-cn):(entityresolution):([a-z]{2}-[a-z]{1,10}-[0-9])::providerservice/([a-zA-Z0-9_-]{1,255})/([a-zA-Z0-9_-]{1,255})`

Required: Yes

intermediateSourceConfiguration

The Amazon S3 location that temporarily stores your data while it processes. Your information won't be saved permanently.

Type: IntermediateSourceConfiguration object

Required: No

providerConfiguration

The required configuration fields to use with the provider service.

Type: JSON value

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProviderSchemaAttribute

The provider schema attribute.

Contents

fieldName

The field name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: Yes

type

The type of the provider schema attribute.

LiveRamp supports: `NAME` | `NAME_FIRST` | `NAME_MIDDLE` | `NAME_LAST` | `ADDRESS` | `ADDRESS_STREET1` | `ADDRESS_STREET2` | `ADDRESS_STREET3` | `ADDRESS_CITY` | `ADDRESS_STATE` | `ADDRESS_COUNTRY` | `ADDRESS_POSTALCODE` | `PHONE` | `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID` | `PROVIDER_ID`

TransUnion supports: `NAME` | `NAME_FIRST` | `NAME_LAST` | `ADDRESS` | `ADDRESS_CITY` | `ADDRESS_STATE` | `ADDRESS_COUNTRY` | `ADDRESS_POSTALCODE` | `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID` | `DATE` | `IPV4` | `IPV6` | `MAID`

Unified ID 2.0 supports: `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID`

Type: String

Valid Values: `NAME | NAME_FIRST | NAME_MIDDLE | NAME_LAST | ADDRESS | ADDRESS_STREET1 | ADDRESS_STREET2 | ADDRESS_STREET3 | ADDRESS_CITY | ADDRESS_STATE | ADDRESS_COUNTRY | ADDRESS_POSTALCODE | PHONE | PHONE_NUMBER | PHONE_COUNTRYCODE | EMAIL_ADDRESS | UNIQUE_ID | DATE | STRING | PROVIDER_ID | IPV4 | IPV6 | MAID`

Required: Yes

hashing

The hashing attribute of the provider schema.

Type: Boolean

Required: No

subType

The sub type of the provider schema attribute.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ProviderServiceSummary

A list of `ProviderService` objects, each of which contain the fields `providerName`, `providerServiceArn`, `providerServiceName`, and `providerServiceType`.

Contents

providerName

The name of the provider. This name is typically the company name.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

providerServiceArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the `providerService`.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 255.

Pattern: `arn:(aws|aws-us-gov|aws-cn):(entityresolution):([a-z]{2}-[a-z]{1,10}-[0-9]):providerservice/([a-zA-Z0-9_-]{1,255})/([a-zA-Z0-9_-]{1,255})`

Required: Yes

providerServiceDisplayName

The display name of the provider service.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Required: Yes

providerServiceName

The name of the product that the provider service provides.

Type: String

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

Pattern: `[a-zA-Z_0-9-]*`

Required: Yes

providerServiceType

The type of provider service.

Type: String

Valid Values: `ASSIGNMENT | ID_MAPPING`

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 Java V2
- AWS SDK for Ruby V3

Record

The record.

Contents

inputSourceARN

The input source ARN of the record.

Type: String

Pattern: `arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(idnamespace/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(matchingworkflow/[a-zA-Z_0-9-]{1,255})$|^arn:(aws|aws-us-gov|aws-cn):glue:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(table/[a-zA-Z_0-9-]{1,255}/[a-zA-Z_0-9-]{1,255})`

Required: Yes

recordAttributeMap

The record's attribute map.

Type: String to string map

Key Length Constraints: Minimum length of 0. Maximum length of 255.

Value Length Constraints: Minimum length of 0. Maximum length of 255.

Required: Yes

uniqueId

The unique ID of the record.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 38.

Pattern: `[a-zA-Z0-9_-]*`

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 Java V2
- AWS SDK for Ruby V3

ResolutionTechniques

An object which defines the `resolutionType` and the `ruleBasedProperties`.

Contents

resolutionType

The type of matching workflow to create. Specify one of the following types:

- `RULE_MATCHING`: Match records using configurable rule-based criteria
- `ML_MATCHING`: Match records using machine learning models
- `PROVIDER`: Match records using a third-party matching provider

Type: String

Valid Values: `RULE_MATCHING | ML_MATCHING | PROVIDER`

Required: Yes

providerProperties

The properties of the provider service.

Type: ProviderProperties object

Required: No

ruleBasedProperties

An object which defines the list of matching rules to run and has a field `rules`, which is a list of rule objects.

Type: RuleBasedProperties object

Required: No

ruleConditionProperties

An object containing the `rules` for a matching workflow.

Type: RuleConditionProperties 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 Java V2
- AWS SDK for Ruby V3

Rule

An object containing the `ruleName` and `matchingKeys`.

Contents

matchingKeys

A list of `MatchingKeys`. The `MatchingKeys` must have been defined in the `SchemaMapping`. Two records are considered to match according to this rule if all of the `MatchingKeys` match.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 15 items.

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: Yes

ruleName

A name for the matching rule.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

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 Java V2
- AWS SDK for Ruby V3

RuleBasedProperties

An object which defines the list of matching rules to run in a matching workflow.

Contents

attributeMatchingModel

The comparison type. You can choose `ONE_TO_ONE` or `MANY_TO_MANY` as the `attributeMatchingModel`.

If you choose `ONE_TO_ONE`, the system can only match attributes if the sub-types are an exact match. For example, for the `Email` attribute type, the system will only consider it a match if the value of the `Email` field of Profile A matches the value of the `Email` field of Profile B.

If you choose `MANY_TO_MANY`, the system can match attributes across the sub-types of an attribute type. For example, if the value of the `Email` field of Profile A and the value of `BusinessEmail` field of Profile B matches, the two profiles are matched on the `Email` attribute type.

Type: String

Valid Values: `ONE_TO_ONE | MANY_TO_MANY`

Required: Yes

rules

A list of `Rule` objects, each of which have fields `RuleName` and `MatchingKeys`.

Type: Array of Rule objects

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

Required: Yes

matchPurpose

An indicator of whether to generate IDs and index the data or not.

If you choose `IDENTIFIER_GENERATION`, the process generates IDs and indexes the data.

If you choose `INDEXING`, the process indexes the data without generating IDs.

Type: String

Valid Values: `IDENTIFIER_GENERATION | INDEXING`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

RuleCondition

An object that defines the `ruleCondition` and the `ruleName` to use in a matching workflow.

Contents

condition

A statement that specifies the conditions for a matching rule.

If your data is accurate, use an Exact matching function: `Exact` or `ExactManyToMany`.

If your data has variations in spelling or pronunciation, use a Fuzzy matching function: `Cosine`, `Levenshtein`, or `Soundex`.

Use operators if you want to combine (`AND`), separate (`OR`), or group matching functions (`...`).

For example: `(Cosine(a, 10) AND Exact(b, true)) OR ExactManyToMany(c, d)`

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: Yes

ruleName

A name for the matching rule.

For example: `Rule1`

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

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 Java V2
- AWS SDK for Ruby V3

RuleConditionProperties

The properties of a rule condition that provides the ability to use more complex syntax.

Contents

rules

A list of rule objects, each of which have fields `ruleName` and `condition`.

Type: Array of RuleCondition objects

Array Members: Minimum number of 1 item. Maximum number of 25 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 Java V2
- AWS SDK for Ruby V3

SchemaInputAttribute

A configuration object for defining input data fields in AWS Entity Resolution. The `SchemaInputAttribute` specifies how individual fields in your input data should be processed and matched.

Contents

fieldName

A string containing the field name.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: Yes

type

The type of the attribute, selected from a list of values.

LiveRamp supports: `NAME` | `NAME_FIRST` | `NAME_MIDDLE` | `NAME_LAST` | `ADDRESS` | `ADDRESS_STREET1` | `ADDRESS_STREET2` | `ADDRESS_STREET3` | `ADDRESS_CITY` | `ADDRESS_STATE` | `ADDRESS_COUNTRY` | `ADDRESS_POSTALCODE` | `PHONE` | `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID` | `PROVIDER_ID`

TransUnion supports: `NAME` | `NAME_FIRST` | `NAME_LAST` | `ADDRESS` | `ADDRESS_CITY` | `ADDRESS_STATE` | `ADDRESS_COUNTRY` | `ADDRESS_POSTALCODE` | `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID` | `IPV4` | `IPV6` | `MAID`

Unified ID 2.0 supports: `PHONE_NUMBER` | `EMAIL_ADDRESS` | `UNIQUE_ID`

> **Note**
>
> Normalization is only supported for `NAME`, `ADDRESS`, `PHONE`, and `EMAIL_ADDRESS`. If you want to normalize `NAME_FIRST`, `NAME_MIDDLE`, and `NAME_LAST`, you must group them by assigning them to the `NAME` `groupName`.

If you want to normalize ADDRESS_STREET1, ADDRESS_STREET2, ADDRESS_STREET3, ADDRESS_CITY, ADDRESS_STATE, ADDRESS_COUNTRY, and ADDRESS_POSTALCODE, you must group them by assigning them to the ADDRESS groupName.
If you want to normalize PHONE_NUMBER and PHONE_COUNTRYCODE, you must group them by assigning them to the PHONE groupName.

Type: String

Valid Values: NAME | NAME_FIRST | NAME_MIDDLE | NAME_LAST | ADDRESS | ADDRESS_STREET1 | ADDRESS_STREET2 | ADDRESS_STREET3 | ADDRESS_CITY | ADDRESS_STATE | ADDRESS_COUNTRY | ADDRESS_POSTALCODE | PHONE | PHONE_NUMBER | PHONE_COUNTRYCODE | EMAIL_ADDRESS | UNIQUE_ID | DATE | STRING | PROVIDER_ID | IPV4 | IPV6 | MAID

Required: Yes

groupName

A string that instructs AWS Entity Resolution to combine several columns into a unified column with the identical attribute type.

For example, when working with columns such as NAME_FIRST, NAME_MIDDLE, and NAME_LAST, assigning them a common groupName will prompt AWS Entity Resolution to concatenate them into a single value.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [a-zA-Z_0-9-]*

Required: No

hashed

Indicates if the column values are hashed in the schema input.

If the value is set to TRUE, the column values are hashed.

If the value is set to FALSE, the column values are cleartext.

Type: Boolean

Required: No

matchKey

A key that allows grouping of multiple input attributes into a unified matching group.

For example, consider a scenario where the source table contains various addresses, such as `business_address` and `shipping_address`. By assigning a `matchKey` called `address` to both attributes, AWS Entity Resolution will match records across these fields to create a consolidated matching group.

If no `matchKey` is specified for a column, it won't be utilized for matching purposes but will still be included in the output table.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: No

subType

The subtype of the attribute, selected from a list of values.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[a-zA-Z_0-9- ]*`

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Java V2
- AWS SDK for Ruby V3

SchemaMappingSummary

An object containing schemaName, schemaArn, createdAt, updatedAt, and hasWorkflows.

Contents

createdAt

The timestamp of when the SchemaMapping was created.

Type: Timestamp

Required: Yes

hasWorkflows

Specifies whether the schema mapping has been applied to a workflow.

Type: Boolean

Required: Yes

schemaArn

The ARN (Amazon Resource Name) that AWS Entity Resolution generated for the SchemaMapping.

Type: String

Pattern: arn:(aws|aws-us-gov|aws-cn):entityresolution:[a-z]{2}-[a-z]{1,10}-[0-9]:[0-9]{12}:(schemamapping/[a-zA-Z_0-9-]{1,255})

Required: Yes

schemaName

The name of the schema.

Type: String

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

Pattern: [a-zA-Z_0-9-]*

Required: Yes

updatedAt

The timestamp of when the `SchemaMapping` was last updated.

Type: Timestamp

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 Java V2
- AWS SDK for Ruby V3

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 403

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

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

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

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

UnrecognizedClientException

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

UnknownOperationException

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 404

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400