API Reference

AWS Directory Service



API Version 2015-04-16

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AWS Directory Service: API Reference

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Welcome

AWS Directory Service is a web service that makes it easy for you to setup and run directories in the AWS cloud, or connect your AWS resources with an existing self-managed Microsoft Active Directory. This guide provides detailed information about AWS Directory Service operations, data types, parameters, and errors. For information about AWS Directory Services features, see AWS Directory Service and the AWS Directory Service Administration Guide.

> **Note**
>
> AWS provides SDKs that consist of libraries and sample code for various programming languages and platforms (Java, Ruby, .Net, iOS, Android, etc.). The SDKs provide a convenient way to create programmatic access to AWS Directory Service and other AWS services. For more information about the AWS SDKs, including how to download and install them, see Tools for Amazon Web Services.

This document was last published on November 14, 2026.

Actions

The following actions are supported:

- AcceptSharedDirectory
- AddIpRoutes
- AddRegion
- AddTagsToResource
- CancelSchemaExtension
- ConnectDirectory
- CreateAlias
- CreateComputer
- CreateConditionalForwarder
- CreateDirectory
- CreateHybridAD
- CreateLogSubscription
- CreateMicrosoftAD
- CreateSnapshot
- CreateTrust
- DeleteADAssessment
- DeleteConditionalForwarder
- DeleteDirectory
- DeleteLogSubscription
- DeleteSnapshot
- DeleteTrust
- DeregisterCertificate
- DeregisterEventTopic
- DescribeADAssessment
- DescribeCAEnrollmentPolicy
- DescribeCertificate
- DescribeClientAuthenticationSettings

- DescribeConditionalForwarders
- DescribeDirectories
- DescribeDirectoryDataAccess
- DescribeDomainControllers
- DescribeEventTopics
- DescribeHybridADUpdate
- DescribeLDAPSSettings
- DescribeRegions
- DescribeSettings
- DescribeSharedDirectories
- DescribeSnapshots
- DescribeTrusts
- DescribeUpdateDirectory
- DisableCAEnrollmentPolicy
- DisableClientAuthentication
- DisableDirectoryDataAccess
- DisableLDAPS
- DisableRadius
- DisableSso
- EnableCAEnrollmentPolicy
- EnableClientAuthentication
- EnableDirectoryDataAccess
- EnableLDAPS
- EnableRadius
- EnableSso
- GetDirectoryLimits
- GetSnapshotLimits
- ListADAssessments
- ListCertificates
- ListIpRoutes

- ListLogSubscriptions
- ListSchemaExtensions
- ListTagsForResource
- RegisterCertificate
- RegisterEventTopic
- RejectSharedDirectory
- RemoveIpRoutes
- RemoveRegion
- RemoveTagsFromResource
- ResetUserPassword
- RestoreFromSnapshot
- ShareDirectory
- StartADAssessment
- StartSchemaExtension
- UnshareDirectory
- UpdateConditionalForwarder
- UpdateDirectorySetup
- UpdateHybridAD
- UpdateNumberOfDomainControllers
- UpdateRadius
- UpdateSettings
- UpdateTrust
- VerifyTrust

AcceptSharedDirectory

Accepts a directory sharing request that was sent from the directory owner account.

Request Syntax

```
{
   "SharedDirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SharedDirectoryId

Identifier of the shared directory in the directory consumer account. This identifier is different for each directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "SharedDirectory": {
      "CreatedDateTime": number,
      "LastUpdatedDateTime": number,
      "OwnerAccountId": "string",
      "OwnerDirectoryId": "string",
      "SharedAccountId": "string",
      "SharedDirectoryId": "string",
      "ShareMethod": "string",
      "ShareNotes": "string",
      "ShareStatus": "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.

SharedDirectory

The shared directory in the directory consumer account.

Type: SharedDirectory object

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryAlreadySharedException

The specified directory has already been shared with this AWS account.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

AddIpRoutes

If the DNS server for your self-managed domain uses a publicly addressable IP address, you must add a CIDR address block to correctly route traffic to and from your Microsoft AD on Amazon Web Services. *AddIpRoutes* adds this address block. You can also use *AddIpRoutes* to facilitate routing traffic that uses public IP ranges from your Microsoft AD on AWS to a peer VPC.

Before you call *AddIpRoutes*, ensure that all of the required permissions have been explicitly granted through a policy. For details about what permissions are required to run the *AddIpRoutes* operation, see AWS Directory Service API Permissions: Actions, Resources, and Conditions Reference.

Request Syntax

```
{
   "DirectoryId": "string",
   "IpRoutes": [
      {
         "CidrIp": "string",
         "CidrIpv6": "string",
         "Description": "string"
      }
   ],
   "UpdateSecurityGroupForDirectoryControllers": boolean
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier (ID) of the directory to which to add the address block.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

IpRoutes

IP address blocks, using CIDR format, of the traffic to route. This is often the IP address block of the DNS server used for your self-managed domain.

Type: Array of IpRoute objects

Required: Yes

UpdateSecurityGroupForDirectoryControllers

If set to true, updates the inbound and outbound rules of the security group that has the description: "AWS created security group for *directory ID* directory controllers." Following are the new rules:

Inbound:

- Type: Custom UDP Rule, Protocol: UDP, Range: 88, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom UDP Rule, Protocol: UDP, Range: 123, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom UDP Rule, Protocol: UDP, Range: 138, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom UDP Rule, Protocol: UDP, Range: 389, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom UDP Rule, Protocol: UDP, Range: 464, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom UDP Rule, Protocol: UDP, Range: 445, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 88, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 135, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 445, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 464, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR

- Type: Custom TCP Rule, Protocol: TCP, Range: 636, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 1024-65535, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: Custom TCP Rule, Protocol: TCP, Range: 3268-33269, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: DNS (UDP), Protocol: UDP, Range: 53, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: DNS (TCP), Protocol: TCP, Range: 53, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: LDAP, Protocol: TCP, Range: 389, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR
- Type: All ICMP, Protocol: All, Range: N/A, Source: AWS Managed Microsoft AD VPC IPv4 CIDR, or IPv6 CIDR

Outbound:

- Type: All traffic, Protocol: All, Range: All, Destination: 0.0.0.0/0 or ::/0 if directory supports IPv6

These security rules impact an internal network interface that is not exposed publicly.

Type: Boolean

Required: No

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

IpRouteLimitExceededException

The maximum allowed number of IP addresses was exceeded. The default limit is 100 IP address blocks.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of AddIpRoutes.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 98
X-Amz-Target: DirectoryService_20150416.AddIpRoutes
X-Amz-Date: 20161212T212029Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=477f3a2802dcc303f69499723eb2e29a455fe3d1b646df0dacfd7c005a3a9509

 {
   "DirectoryId":"d-926example",
   "IpRoutes":[
      {
         "Description":"my IpRoute",
         "CidrIp":"12.12.12.12/32"
      }
   ]
 }
```

Example Response

This example illustrates one usage of AddIpRoutes.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 21:20:31 GMT

 {
 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

AddRegion

Adds two domain controllers in the specified Region for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "RegionName": "string",
   "VPCSettings": {
      "SubnetIds": [ "string" ],
      "VpcId": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory to which you want to add Region replication.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RegionName

The name of the Region where you want to add domain controllers for replication. For example, `us-east-1`.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: Yes

VPCSettings

Contains VPC information for the CreateDirectory, CreateMicrosoftAD, or CreateHybridAD operation.

Type: DirectoryVpcSettings object

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryAlreadyInRegionException

The Region you specified is the same Region where the AWS Managed Microsoft AD directory was created. Specify a different Region and try again.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

RegionLimitExceededException

You have reached the limit for maximum number of simultaneous Region replications per directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

AddTagsToResource

Adds or overwrites one or more tags for the specified directory. Each directory can have a maximum of 50 tags. Each tag consists of a key and optional value. Tag keys must be unique to each resource.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ResourceId

Identifier (ID) for the directory to which to add the tag.

Type: String

Pattern: `^[d]-[0-9a-f]{10}$`

Required: Yes

Tags

The tags to be assigned to the directory.

Type: Array of Tag objects

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

TagLimitExceededException

The maximum allowed number of tags was exceeded.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of AddTagsToResource.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 87
X-Amz-Target: DirectoryService_20150416.AddTagsToResource
X-Amz-Date: 20161212T222805Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
```

```
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=2756d8b256b5e6b3d74879557e4f421d21111510a78c6c3650a7a93809d533c4

 {
   "ResourceId":"d-926example",
   "Tags":[
      {
         "Key":"environment",
         "Value":"production"
      }
   ]
 }
```

Example Response

This example illustrates one usage of AddTagsToResource.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 419ff1d5-c0ba-11e6-9ed0-172b3469d361
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 22:28:07 GMT

 {
 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CancelSchemaExtension

Cancels an in-progress schema extension to a Microsoft AD directory. Once a schema extension has started replicating to all domain controllers, the task can no longer be canceled. A schema extension can be canceled during any of the following states; `Initializing`, `CreatingSnapshot`, and `UpdatingSchema`.

Request Syntax

```
{
   "DirectoryId": "string",
   "SchemaExtensionId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory whose schema extension will be canceled.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

SchemaExtensionId

The identifier of the schema extension that will be canceled.

Type: String

Pattern: `^e-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CancelSchemaExtension.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 68
X-Amz-Target: DirectoryService_20150416.CancelSchemaExtension
X-Amz-Date: 20161212T231630Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=14da7b7426d03c907c02a3e29f96158b8c1cd2be2e0f323a86b338a1614848f1

 {
   "DirectoryId": "d-926example",
   "SchemaExtensionId": "e-926731d2a0"
 }
```

Example Response

This example illustrates one usage of CancelSchemaExtension.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 04eada50-c0c1-11e6-887b-29887bf36843
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 23:16:32 GMT

 {
 }
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ConnectDirectory

Creates an AD Connector to connect to a self-managed directory.

Before you call `ConnectDirectory`, ensure that all of the required permissions have been explicitly granted through a policy. For details about what permissions are required to run the `ConnectDirectory` operation, see AWS Directory Service API Permissions: Actions, Resources, and Conditions Reference.

Request Syntax

```
{
   "ConnectSettings": {
      "CustomerDnsIps": [ "string" ],
      "CustomerDnsIpsV6": [ "string" ],
      "CustomerUserName": "string",
      "SubnetIds": [ "string" ],
      "VpcId": "string"
   },
   "Description": "string",
   "Name": "string",
   "NetworkType": "string",
   "Password": "string",
   "ShortName": "string",
   "Size": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ConnectSettings

A DirectoryConnectSettings object that contains additional information for the operation.

Type: DirectoryConnectSettings object

Required: Yes

Description

A description for the directory.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

Name

The fully qualified name of your self-managed directory, such as `corp.example.com`.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: Yes

NetworkType

The network type for your directory. The default value is `IPv4` or `IPv6` based on the provided subnet capabilities.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

Password

The password for your self-managed user account.

Type: String

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

Required: Yes

ShortName

The NetBIOS name of your self-managed directory, such as `CORP`.

Type: String

Pattern: `^[^\\/:*?"<>|.]+[^\\/:*?"<>|]*$`

Required: No

Size

The size of the directory.

Type: String

Valid Values: `Small | Large`

Required: Yes

Tags

The tags to be assigned to AD Connector.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The identifier of the new directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryLimitExceededException

The maximum number of directories in the region has been reached. You can use the GetDirectoryLimits operation to determine your directory limits in the region.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of ConnectDirectory.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 295
X-Amz-Target: DirectoryService_20150416.ConnectDirectory
X-Amz-Date: 20161212T233740Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=60ddfa4a90d91327ef8cb510563d6f031eab1b092d5b1034fab7b157733bf86b

 {
   "Name":"corp.example.com",
   "ConnectSettings":{
      "CustomerUserName":"Administrator",
      "VpcId":"vpc-45025421",
      "SubnetIds":[
         "subnet-ba0146de",
         "subnet-bef46bc8"
      ],
```

```
      "CustomerDnsIps":[
         "172.30.21.228"
      ]
   },
   "Description":"Connector to corp",
   "ShortName":"corp",
   "Password":"Str0ngP@ssw0rd",
   "Size":"Small"
}
```

Example Response

This example illustrates one usage of ConnectDirectory.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fa22d0f1-c0c3-11e6-9ed0-172b3469d361
Content-Type: application/x-amz-json-1.1
Content-Length: 30
Date: Mon, 12 Dec 2016 23:37:43 GMT

{
   "DirectoryId":"d-926example"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)

- AWS SDK for Ruby V3

CreateAlias

Creates an alias for a directory and assigns the alias to the directory. The alias is used to construct the access URL for the directory, such as `http://<alias>.awsapps.com`.

> **Important**
>
> After an alias has been created, it cannot be deleted or reused, so this operation should only be used when absolutely necessary.

Request Syntax

```
{
   "Alias": "string",
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Alias

The requested alias.

The alias must be unique amongst all aliases in AWS. This operation throws an `EntityAlreadyExistsException` error if the alias already exists.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 62.

Pattern: `^(?!D-|d-)([\da-zA-Z]+)([-]*[\da-zA-Z])*`

Required: Yes

DirectoryId

The identifier of the directory for which to create the alias.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "Alias": "string",
   "DirectoryId": "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.

Alias

The alias for the directory.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 62.

Pattern: `^(?!D-|d-)([\da-zA-Z]+)([-]*[\da-zA-Z])*`

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateAlias.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 52X-Amz-Target:DirectoryService_20150416.CreateAlias
X-Amz-Date: 20161209T175951Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161209/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=673029721752b71c1ff4752d0e42e6a05283c305238538d746c2b42d7864ec11

 {
   "DirectoryId": "d-926example",
   "Alias": "myaccess"
 }
```

Example Response

This example illustrates one usage of CreateAlias.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 49abfbf6-be39-11e6-9458-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 49
Date: Fri, 09 Dec 2016 17:59:57 GMT

{
  "Alias": "myaccess",
  "DirectoryId": "d-926example"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateComputer

Creates an Active Directory computer object in the specified directory.

Request Syntax

```
{
   "ComputerAttributes": [
      {
         "Name": "string",
         "Value": "string"
      }
   ],
   "ComputerName": "string",
   "DirectoryId": "string",
   "OrganizationalUnitDistinguishedName": "string",
   "Password": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ComputerAttributes

An array of Attribute objects that contain any LDAP attributes to apply to the computer account.

Type: Array of Attribute objects

Required: No

ComputerName

The name of the computer account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 15.

Required: Yes

DirectoryId

The identifier of the directory in which to create the computer account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

OrganizationalUnitDistinguishedName

The fully-qualified distinguished name of the organizational unit to place the computer account in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2000.

Required: No

Password

A one-time password that is used to join the computer to the directory. You should generate a random, strong password to use for this parameter.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 64.

Pattern: `[\u0020-\u00FF]+`

Required: Yes

Response Syntax

```
{
   "Computer": {
      "ComputerAttributes": [
         {
            "Name": "string",
            "Value": "string"
```

```
            }
        ],
        "ComputerId": "string",
        "ComputerName": "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.

Computer

A Computer object that represents the computer account.

Type: Computer object

Errors

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

AuthenticationFailedException

An authentication error occurred.

Message

The textual message for the exception.

RequestId

The identifier of the request that caused the exception.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateComputer.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 245
X-Amz-Target: DirectoryService_20150416.CreateComputer
X-Amz-Date: 20161213T163452Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=5fa12f147bce3620568504361b860de07868da3b1c27d5f0bde6e5ffa51bf6ef

 {
   "DirectoryId":"d-926example",
   "ComputerName":"labcomputer",
   "Password":"Str0ngP@ssw0rd",
   "ComputerAttributes":[
      {
         "Name":"ip",
         "Value":"192.168.101.100"
      }
   ],

 "OrganizationalUnitDistinguishedName":"OU=Computers,OU=example,DC=corp,DC=example,DC=com"
 }
```

Example Response

This example illustrates one usage of CreateComputer.

```
HTTP/1.1 200 OK
x-amzn-RequestId: afcea813-c196-11e6-a6a8-5110402a26c3
Content-Type: application/x-amz-json-1.1
Content-Length: 286
Date: Wed, 14 Dec 2016 00:46:03 GMT

{
   "Computer":{
      "ComputerAttributes":[
         {
            "Name":"DistinguishedName",
            "Value":"CN=labcomputer,OU=Computers,OU=example,DC=corp,DC=example,DC=com"
```

```
            },
            {
               "Name":"WindowsSamName",
               "Value":"labcomputer$"
            }
         ],
         "ComputerId":"S-1-5-21-1932691875-1648176379-1176097576-1124",
         "ComputerName":"labcomputer"
      }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateConditionalForwarder

Creates a conditional forwarder associated with your AWS directory. Conditional forwarders are required in order to set up a trust relationship with another domain. The conditional forwarder points to the trusted domain.

Request Syntax

```
{
   "DirectoryId": "string",
   "DnsIpAddrs": [ "string" ],
   "DnsIpv6Addrs": [ "string" ],
   "RemoteDomainName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory ID of the AWS directory for which you are creating the conditional forwarder.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

DnsIpAddrs

The IP addresses of the remote DNS server associated with RemoteDomainName.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addrs

The IPv6 addresses of the remote DNS server associated with RemoteDomainName.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

RemoteDomainName

The fully qualified domain name (FQDN) of the remote domain with which you will set up a trust relationship.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateConditionalForwarder.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
```

```
Accept-Encoding: identity
Content-Length: 105
X-Amz-Target: DirectoryService_20150416.CreateConditionalForwarder
X-Amz-Date: 20161213T215543Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=717e381f0258731fe0197c68d1f5d2a0e96825119c15a6e0dcfa2d07063c6af6

 {
   "DirectoryId":"d-926example",
   "RemoteDomainName":"sales.example.com",
   "DnsIpAddrs":[
      "172.30.21.228"
   ]
 }
```

Example Response

This example illustrates one usage of CreateConditionalForwarder.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 68e74443-c180-11e6-91f4-6dbff6648f8a
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Tue, 13 Dec 2016 22:06:34 GMT

 {

 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateDirectory

> **Note**
>
> Simple AD is no longer open to new customers. For capabilities similar to Simple AD, explore Directory Service Managed Microsoft AD or AD Connector. For more information, see Simple AD availability changes.

Creates a Simple AD directory. For more information, see Simple Active Directory in the *AWS Directory Service Admin Guide*.

Before you call `CreateDirectory`, ensure that all of the required permissions have been explicitly granted through a policy. For details about what permissions are required to run the `CreateDirectory` operation, see AWS Directory Service API Permissions: Actions, Resources, and Conditions Reference.

Request Syntax

```
{
   "Description": "string",
   "Name": "string",
   "NetworkType": "string",
   "Password": "string",
   "ShortName": "string",
   "Size": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "VpcSettings": {
      "SubnetIds": [ "string" ],
      "VpcId": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description for the directory.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

Name

The fully qualified name for the directory, such as `corp.example.com`.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: Yes

NetworkType

The network type for your directory. Simple AD supports IPv4 and Dual-stack only.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

Password

The password for the directory administrator. The directory creation process creates a directory administrator account with the user name `Administrator` and this password.

If you need to change the password for the administrator account, you can use the ResetUserPassword API call.

The regex pattern for this string is made up of the following conditions:

- Length (?=^.{8,64}$) – Must be between 8 and 64 characters

AND any 3 of the following password complexity rules required by Active Directory:

- Numbers and upper case and lowercase (?=.*\d)(?=.*[A-Z])(?=.*[a-z])
- Numbers and special characters and lower case (?=.*\d)(?=.*[^A-Za-z0-9\s])(?=.*[a-z])
- Special characters and upper case and lower case (?=.*[^A-Za-z0-9\s])(?=.*[A-Z])(?=.*[a-z])
- Numbers and upper case and special characters (?=.*\d)(?=.*[A-Z])(?=.*[^A-Za-z0-9\s])

For additional information about how Active Directory passwords are enforced, see Password must meet complexity requirements on the Microsoft website.

Type: String

Pattern: `(?=^.{8,64}$)((?=.*\d)(?=.*[A-Z])(?=.*[a-z])|(?=.*\d)(?=.*[^A-Za-z0-9\s])(?=.*[a-z])|(?=.*[^A-Za-z0-9\s])(?=.*[A-Z])(?=.*[a-z])|(?=.*\d)(?=.*[A-Z])(?=.*[^A-Za-z0-9\s]))^.*`

Required: Yes

ShortName

The NetBIOS name of the directory, such as `CORP`.

Type: String

Pattern: `^[^\\/:*?"<>|.]+[^\\/:*?"<>|]*$`

Required: No

Size

The size of the directory.

Type: String

Valid Values: `Small | Large`

Required: Yes

Tags

The tags to be assigned to the Simple AD directory.

Type: Array of Tag objects

Required: No

VpcSettings

A DirectoryVpcSettings object that contains additional information for the operation.

Type: DirectoryVpcSettings object

Required: No

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The identifier of the directory that was created.

Type: String

Pattern: ^d-[0-9a-f]{10}$

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryLimitExceededException

The maximum number of directories in the region has been reached. You can use the GetDirectoryLimits operation to determine your directory limits in the region.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateDirectory.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 245
X-Amz-Target: DirectoryService_20150416.CreateDirectory
X-Amz-Date: 20161213T222613Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e0bf599277231d294b0ebb1c7ad7a68aafdfc49db016adbee32a167954c53d54

 {
   "Description":"Regional directory for example.com",
   "VpcSettings":{
      "SubnetIds":[
         "subnet-ba0146de",
         "subnet-bef46bc8"
      ],
      "VpcId":"vpc-45025421"
   },
   "Name":"seattle.example.com",
   "ShortName":"seattle",
   "Password":"Str0ngP@ssw0rd",
   "Size":"Small"
 }
```

Example Response

This example illustrates one usage of CreateDirectory.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 298112b6-c183-11e6-9b49-eff49203d13b
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 30
Date: Tue, 13 Dec 2016 22:26:17 GMT

{
   "DirectoryId":"d-926example"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateHybridAD

Creates a hybrid directory that connects your self-managed Active Directory (AD) infrastructure and AWS.

You must have a successful directory assessment using StartADAssessment to validate your environment compatibility before you use this operation.

Updates are applied asynchronously. Use DescribeDirectories to monitor the progress of directory creation.

Request Syntax

```
{
   "AssessmentId": "string",
   "SecretArn": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

AssessmentId

The unique identifier of the successful directory assessment that validates your self-managed AD environment. You must have a successful directory assessment before you create a hybrid directory.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Required: Yes

SecretArn

The Amazon Resource Name (ARN) of the AWS Secrets Manager secret that contains the credentials for the service account used to join hybrid domain controllers to your self-managed AD domain. This secret is used once and not stored.

The secret must contain key-value pairs with keys matching `customerAdAdminDomainUsername` and `customerAdAdminDomainPassword`. For example: `{"customerAdAdminDomainUsername":"carlos_salazar","customerAdAdminDomainPassw`

Type: String

Pattern: `^arn:aws:secretsmanager:[a-z0-9-]+:\d{12}:secret:[a-zA-Z0-9/_+=.@-]+-[a-zA-Z0-9]{6}$`

Required: Yes

Tags

The tags to be assigned to the directory. Each tag consists of a key and value pair. You can specify multiple tags as a list.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The unique identifier of the newly created hybrid directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ADAssessmentLimitExceededException

A directory assessment is automatically created when you create a hybrid directory. There are two types of assessments: `CUSTOMER` and `SYSTEM`. Your AWS account has a limit of 100 `CUSTOMER` directory assessments.

If you attempt to create a hybrid directory; and you already have 100 `CUSTOMER` directory assessments;, you will encounter an error. Delete assessments to free up capacity before trying again.

You can request an increase to your `CUSTOMER` directory assessment quota by contacting customer support or delete existing CUSTOMER directory assessments; to free up capacity.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryLimitExceededException

The maximum number of directories in the region has been reached. You can use the GetDirectoryLimits operation to determine your directory limits in the region.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateHybridAD.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 298
X-Amz-Target: DirectoryService_20150416.CreateHybridAD
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAIOSFODNN7EXAMPLE/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
    "SecretArn": "arn:aws:secretsmanager:eu-west-1:111122223333:secret:CredExample-
DZESji",
```

```
    "AssessmentId": "da-1234567890example1",
    "Tags": [{
        "Key": "Environment",
        "Value": "Production"
    }]
}
```

Example Response

This example illustrates one usage of CreateHybridAD.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 30
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "DirectoryId": "d-926example"
}}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateLogSubscription

Creates a subscription to forward real-time Directory Service domain controller security logs to the specified Amazon CloudWatch log group in your AWS account.

Request Syntax

```
{
   "DirectoryId": "string",
   "LogGroupName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier of the directory to which you want to subscribe and receive real-time logs to your specified CloudWatch log group.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

LogGroupName

The name of the CloudWatch log group where the real-time domain controller logs are forwarded.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: `[-._/#A-Za-z0-9]+`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InsufficientPermissionsException

The account does not have sufficient permission to perform the operation.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateMicrosoftAD

Creates a Microsoft AD directory in the AWS Cloud. For more information, see AWS Managed Microsoft AD in the *AWS Directory Service Admin Guide*.

Before you call *CreateMicrosoftAD*, ensure that all of the required permissions have been explicitly granted through a policy. For details about what permissions are required to run the *CreateMicrosoftAD* operation, see AWS Directory Service API Permissions: Actions, Resources, and Conditions Reference.

Request Syntax

```
{
   "Description": "string",
   "Edition": "string",
   "Name": "string",
   "NetworkType": "string",
   "Password": "string",
   "ShortName": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "VpcSettings": {
      "SubnetIds": [ "string" ],
      "VpcId": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description for the directory. This label will appear on the AWS console `Directory Details` page after the directory is created.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

Edition

AWS Managed Microsoft AD is available in two editions: `Standard` and `Enterprise`. `Enterprise` is the default.

Type: String

Valid Values: `Enterprise | Standard | Hybrid`

Required: No

Name

The fully qualified domain name for the AWS Managed Microsoft AD directory, such as `corp.example.com`. This name will resolve inside your VPC only. It does not need to be publicly resolvable.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: Yes

NetworkType

The network type for your domain. The default value is `IPv4` or `IPv6` based on the provided subnet capabilities.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

Password

The password for the default administrative user named `Admin`.

If you need to change the password for the administrator account, you can use the ResetUserPassword API call.

Type: String

Pattern: `(?=^.{8,64}$)((?=.*\d)(?=.*[A-Z])(?=.*[a-z])|(?=.*\d)(?=.*[^A-Za-z0-9\s])(?=.*[a-z])|(?=.*[^A-Za-z0-9\s])(?=.*[A-Z])(?=.*[a-z])|(?=.*\d)(?=.*[A-Z])(?=.*[^A-Za-z0-9\s]))^.*`

Required: Yes

ShortName

The NetBIOS name for your domain, such as CORP. If you don't specify a NetBIOS name, it will default to the first part of your directory DNS. For example, CORP for the directory DNS `corp.example.com`.

Type: String

Pattern: `^[^\\/:*?"<>|.]+[^\\/:*?"<>|]*$`

Required: No

Tags

The tags to be assigned to the AWS Managed Microsoft AD directory.

Type: Array of Tag objects

Required: No

VpcSettings

Contains VPC information for the CreateDirectory or CreateMicrosoftAD operation.

Type: DirectoryVpcSettings object

Required: Yes

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The identifier of the directory that was created.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryLimitExceededException

The maximum number of directories in the region has been reached. You can use the GetDirectoryLimits operation to determine your directory limits in the region.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateMicrosoftAD.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 207
X-Amz-Target: DirectoryService_20150416.CreateMicrosoftAD
X-Amz-Date: 20161213T231510Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=5a73aaebf6dd7db4a17ffa5a0a5af7f8e134ad03034cb0b3e05e4f1a999d9e0a

 {
   "ShortName":"ad",
   "Password":"Str0ngP@ssw0rd",
   "Name":"ad.example.com",
   "Description":"Corporate AD directory",
   "VpcSettings":{
      "SubnetIds":[
         "subnet-ba0146de",
         "subnet-bef46bc8"
      ],
      "VpcId":"vpc-45025421"
   }
 }
```

Example Response

This example illustrates one usage of CreateMicrosoftAD.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 00019586-c18a-11e6-870b-c3330207df37
Content-Type: application/x-amz-json-1.1
Content-Length: 30
Date: Tue, 13 Dec 2016 23:15:12 GMT

{
   "DirectoryId":"d-926example"
```

```
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateSnapshot

Creates a snapshot of a Simple AD or Microsoft AD directory in the AWS cloud.

> **Note**
>
> You cannot take snapshots of AD Connector directories.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory of which to take a snapshot.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Name

The descriptive name to apply to the snapshot.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

Response Syntax

```
{
   "SnapshotId": "string"
}
```

Response Elements

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

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

SnapshotId

The identifier of the snapshot that was created.

Type: String

Pattern: `^s-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

SnapshotLimitExceededException

The maximum number of manual snapshots for the directory has been reached. You can use the GetSnapshotLimits operation to determine the snapshot limits for a directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateSnapshot.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 58
X-Amz-Target: DirectoryService_20150416.CreateSnapshot
X-Amz-Date: 20161213T233356Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=8789d87320d00e26fec4d745a34b3c5d898e4e89bf96b5f9c744ca612bed3d6d

 {
   "DirectoryId":"d-926example",
   "Name":"ad.example.com"
 }
```

Example Response

This example illustrates one usage of CreateSnapshot.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 9eedb7ba-c18c-11e6-a099-03078e35561b
Content-Type: application/x-amz-json-1.1
Content-Length: 29
Date: Tue, 13 Dec 2016 23:33:58 GMT

{
   "SnapshotId":"s-9267f8d3f0"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

CreateTrust

AWS Directory Service for Microsoft Active Directory allows you to configure trust relationships. For example, you can establish a trust between your AWS Managed Microsoft AD directory, and your existing self-managed Microsoft Active Directory. This would allow you to provide users and groups access to resources in either domain, with a single set of credentials.

This action initiates the creation of the AWS side of a trust relationship between an AWS Managed Microsoft AD directory and an external domain. You can create either a forest trust or an external trust.

Request Syntax

```
{
   "ConditionalForwarderIpAddrs": [ "string" ],
   "ConditionalForwarderIpv6Addrs": [ "string" ],
   "DirectoryId": "string",
   "RemoteDomainName": "string",
   "SelectiveAuth": "string",
   "TrustDirection": "string",
   "TrustPassword": "string",
   "TrustType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ConditionalForwarderIpAddrs

The IP addresses of the remote DNS server associated with RemoteDomainName.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

ConditionalForwarderIpv6Addrs

The IPv6 addresses of the remote DNS server associated with RemoteDomainName.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

DirectoryId

The Directory ID of the AWS Managed Microsoft AD directory for which to establish the trust relationship.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RemoteDomainName

The Fully Qualified Domain Name (FQDN) of the external domain for which to create the trust relationship.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: Yes

SelectiveAuth

Optional parameter to enable selective authentication for the trust.

Type: String

Valid Values: `Enabled | Disabled`

Required: No

TrustDirection

The direction of the trust relationship.

Type: String

Valid Values: `One-Way: Outgoing | One-Way: Incoming | Two-Way`

Required: Yes

TrustPassword

The trust password. The trust password must be the same password that was used when creating the trust relationship on the external domain.

Type: String

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

Pattern: `^(\p{LD}|\p{Punct}| )+$`

Required: Yes

TrustType

The trust relationship type. `Forest` is the default.

Type: String

Valid Values: `Forest | External`

Required: No

Response Syntax

```
{
   "TrustId": "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.

TrustId

A unique identifier for the trust relationship that was created.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of CreateTrust.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 222
X-Amz-Target: DirectoryService_20150416.CreateTrust
X-Amz-Date: 20161213T235223Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161213/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=1f0cff7825d20bab2a0dab1e0b8bedbed72f0c22175c7d9ed0e63598ae99cae5

 {
   "TrustPassword":"Str0ngP@ssw0rd",
   "DirectoryId":"d-926example",
   "RemoteDomainName":"europe.example.com",
   "ConditionalForwarderIpAddrs":[
      "172.30.21.228"
   ],
   "TrustType":"Forest",
   "TrustDirection":"One-Way: Outgoing"
 }
```

Example Response

This example illustrates one usage of CreateTrust.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 3343bc79-c18f-11e6-ba7f-e33ae22bc363
Content-Type: application/x-amz-json-1.1
Content-Length: 26
Date: Tue, 13 Dec 2016 23:52:26 GMT

{
   "TrustId":"t-9267353743"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteADAssessment

Deletes a directory assessment and all associated data. This operation permanently removes the assessment results, validation reports, and configuration information.

You cannot delete system-initiated assessments. You can delete customer-created assessments even if they are in progress.

Request Syntax

```
{
   "AssessmentId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssessmentId

The unique identifier of the directory assessment to delete.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Required: Yes

Response Syntax

```
{
   "AssessmentId": "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.

AssessmentId

The unique identifier of the deleted directory assessment.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeleteADAssessment.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 45
```

```
X-Amz-Target: DirectoryService_20150416.DeleteADAssessment
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAIOSFODNN7EXAMPLE/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
   "AssessmentId": "da-1234567890example1"
}
```

Example Response

This example illustrates one usage of DeleteADAssessment.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 45
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
   "AssessmentId": "da-1234567890example1"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteConditionalForwarder

Deletes a conditional forwarder that has been set up for your AWS directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "RemoteDomainName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory ID for which you are deleting the conditional forwarder.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RemoteDomainName

The fully qualified domain name (FQDN) of the remote domain with which you are deleting the conditional forwarder.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeleteConditionalForwarder.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
```

```
Accept-Encoding: identity
Content-Length: 76
X-Amz-Target: DirectoryService_20150416.DeleteConditionalForwarder
X-Amz-Date: 20161214T001055Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=ffc3c3d6feac461a9b093cab94dd8957b252f2936b51f14a1ad8499a8b401d4a

 {
   "DirectoryId":"d-926example",
   "RemoteDomainName":"sales.example.com"
 }
```

Example Response

This example illustrates one usage of DeleteConditionalForwarder.

```
HTTP/1.1 200 OK
x-amzn-RequestId: ca119fd0-c191-11e6-8f8e-ed61d076c15a
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 00:11:00 GMT

 {

 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteDirectory

Deletes an AWS Directory Service directory.

Before you call `DeleteDirectory`, ensure that all of the required permissions have been explicitly granted through a policy. For details about what permissions are required to run the `DeleteDirectory` operation, see AWS Directory Service API Permissions: Actions, Resources, and Conditions Reference.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory to delete.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeleteDirectory.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
X-Amz-Target: DirectoryService_20150416.DeleteDirectory
X-Amz-Date: 20161214T002424Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=b542aa77381528e27afcf08b229252606fa79723695fb2d19b81b51d66d7f92d

 {
   "DirectoryId": "d-926example"
 }
```

Example Response

This example illustrates one usage of DeleteDirectory.

```
HTTP/1.1 200 OK
x-amzn-RequestId: abcbeb82-c193-11e6-bf9e-272b6602bf9f
Content-Type: application/x-amz-json-1.1
Content-Length: 30
Date: Wed, 14 Dec 2016 00:24:26 GMT

{
```

```
    "DirectoryId":"d-926example"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteLogSubscription

Deletes the specified log subscription.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier of the directory whose log subscription you want to delete.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteSnapshot

Deletes a directory snapshot.

Request Syntax

```
{
   "SnapshotId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SnapshotId

The identifier of the directory snapshot to be deleted.

Type: String

Pattern: `^s-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "SnapshotId": "string"
}
```

Response Elements

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

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

SnapshotId

The identifier of the directory snapshot that was deleted.

Type: String

Pattern: `^s-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeleteSnapshot.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 30
X-Amz-Target: DirectoryService_20150416.DeleteSnapshot
X-Amz-Date: 20161214T012131Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=685c5716e7e11b8d5b2ed5f413d6ff47fe179a1f215b83aa89d00d3b28827c1c

 {
   "SnapshotId": "s-9267f8d3f0"
 }
```

Example Response

This example illustrates one usage of DeleteSnapshot.

```
HTTP/1.1 200 OK
x-amzn-RequestId: a68a1e79-c19b-11e6-870b-c3330207df37
Content-Type: application/x-amz-json-1.1
Content-Length: 29
Date: Wed, 14 Dec 2016 01:21:34 GMT

{
   "SnapshotId":"s-9267f8d3f0"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeleteTrust

Deletes an existing trust relationship between your AWS Managed Microsoft AD directory and an external domain.

Request Syntax

```
{
   "DeleteAssociatedConditionalForwarder": boolean,
   "TrustId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DeleteAssociatedConditionalForwarder

Delete a conditional forwarder as part of a DeleteTrustRequest.

Type: Boolean

Required: No

TrustId

The Trust ID of the trust relationship to be deleted.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "TrustId": "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.

TrustId

The Trust ID of the trust relationship that was deleted.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeleteTrust.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 73
X-Amz-Target: DirectoryService_20150416.DeleteTrust
X-Amz-Date: 20161214T013332Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=ced49ef4329d015ebde09b7bc586eee4455b0b1e6608ade2fd6cd123440bbd6d

 {
   "TrustId": "t-9267353743",
   "DeleteAssociatedConditionalForwarder": true
 }
```

Example Response

This example illustrates one usage of DeleteTrust.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 54425c2e-c19d-11e6-b0d6-83af322c90cd
Content-Type: application/x-amz-json-1.1
Content-Length: 26
Date: Wed, 14 Dec 2016 01:33:37 GMT

{
   "TrustId":"t-9267353743"
}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeregisterCertificate

Deletes from the system the certificate that was registered for secure LDAP or client certificate authentication.

Request Syntax

```
{
   "CertificateId": "string",
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CertificateId

The identifier of the certificate.

Type: String

Pattern: `^c-[0-9a-f]{10}$`

Required: Yes

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

CertificateDoesNotExistException

The certificate is not present in the system for describe or deregister activities.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

CertificateInUseException

The certificate is being used for the LDAP security connection and cannot be removed without disabling LDAP security.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DeregisterEventTopic

Removes the specified directory as a publisher to the specified Amazon SNS topic.

Request Syntax

```
{
   "DirectoryId": "string",
   "TopicName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The Directory ID to remove as a publisher. This directory will no longer send messages to the specified Amazon SNS topic.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

TopicName

The name of the Amazon SNS topic from which to remove the directory as a publisher.

Type: String

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

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DeregisterEventTopic.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 52
X-Amz-Target: DirectoryService_20150416.DeregisterEventTopic
X-Amz-Date: 20161214T014408Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b8ad858165a3dd7d4fb35b0adf17bee8d71aed26b0f49e6db792ed8b10f8b1

 {
   "DirectoryId": "d-926example",
   "TopicName": "snstopicexample"
 }
```

Example Response

This example illustrates one usage of DeregisterEventTopic.

```
HTTP/1.1 200 OK
x-amzn-RequestId: a68a1e79-c19b-11e6-870b-c3330207df37
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 29
Date: Wed, 14 Dec 2016 01:44:10 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeADAssessment

Retrieves detailed information about a directory assessment, including its current status, validation results, and configuration details. Use this operation to monitor assessment progress and review results.

Request Syntax

```
{
   "AssessmentId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssessmentId

The identifier of the directory assessment to describe.

Type: String

Pattern: ^da-[0-9a-f]{18}$

Required: Yes

Response Syntax

```
{
   "Assessment": {
      "AssessmentId": "string",
      "CustomerDnsIps": [ "string" ],
      "DirectoryId": "string",
      "DnsName": "string",
      "LastUpdateDateTime": number,
      "ReportType": "string",
      "SecurityGroupIds": [ "string" ],
      "SelfManagedInstanceIds": [ "string" ],
      "StartTime": number,
```

```
      "Status": "string",
      "StatusCode": "string",
      "StatusReason": "string",
      "SubnetIds": [ "string" ],
      "Version": "string",
      "VpcId": "string"
   },
   "AssessmentReports": [
      {
         "DomainControllerIp": "string",
         "Validations": [
            {
               "Category": "string",
               "LastUpdateDateTime": number,
               "Name": "string",
               "StartTime": number,
               "Status": "string",
               "StatusCode": "string",
               "StatusReason": "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.

Assessment

Detailed information about the self-managed instance settings (IDs and DNS IPs).

Type: Assessment object

AssessmentReports

A list of assessment reports containing validation results for each domain controller and test category. Each report includes specific validation details and outcomes.

Type: Array of AssessmentReport objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeADAssessment.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 45
X-Amz-Target: DirectoryService_20150416.DescribeADAssessment
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAIOSFODNN7EXAMPLE/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
```

```
{
    "AssessmentId": "da-1234567890example1"
}
```

Example Response

This example illustrates one usage of DescribeADAssessment.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 892
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "Assessment": {
        "AssessmentId": "da-1234567890example1",
        "DnsName": "ad.example.com",
        "StartTime": "2025-06-10T14:28:54.934000-04:00",
        "LastUpdateDateTime": "2025-06-10T14:55:52.197000-04:00",
        "Status": "SUCCESS",
        "CustomerDnsIps": [
            "10.24.34.100",
            "10.24.34.200"
        ]
        "VpcId": "vpc-0e1051example5f2a",
        "SubnetIds": [
            "subnet-0fee0examplee9604",
            "subnet-076dbexample5ed88"
        ],
        "SelfManagedInstanceIds": [
            "i-10243410",
            "i-10243420"
        ],
        "ReportType": "CUSTOMER",
        "Version": "v1"
    },
    "AssessmentReports": [
        {
            "DomainControllerIp": "10.24.34.100",
            "Validations": [
                {
                    "Category": "preValidationTests",
```

```
                    "Name": "testDnsIpMatch",
                    "Status": "SUCCESS",
                    "StartTime": "2025-06-10T14:30:00.374000-04:00",
                    "LastUpdateDateTime": "2025-06-10T14:30:35.400000-04:00"
                },
                    . . .
            ]
        },
        {
            "DomainControllerIp": "10.24.34.200",
            "Validations": [
                {
                    "Category": "preValidationTests",
                    "Name": "testDnsIpMatch",
                    "Status": "SUCCESS",
                    "StartTime": "2025-06-10T14:30:00.374000-04:00",
                    "LastUpdateDateTime": "2025-06-10T14:30:35.446000-04:00"
                },
                    . . .
            ]
        }
    ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeCAEnrollmentPolicy

Retrieves detailed information about the certificate authority (CA) enrollment policy for the specified directory. This policy determines how client certificates are automatically enrolled and managed through AWS Private Certificate Authority.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to retrieve the CA enrollment policy information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "CaEnrollmentPolicyStatus": "string",
   "CaEnrollmentPolicyStatusReason": "string",
   "DirectoryId": "string",
   "LastUpdatedDateTime": number,
   "PcaConnectorArn": "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.

CaEnrollmentPolicyStatus

The current status of the CA enrollment policy. This indicates if automatic certificate enrollment is currently active, inactive, or in a transitional state.

Valid values:

- `IN_PROGRESS` - The policy is being activated T
- `SUCCESS` - The policy is active and automatic certificate enrollment is operational
- `FAILED` - The policy activation or deactivation failed
- `DISABLING` - The policy is being deactivated
- `DISABLED` - The policy is inactive and automatic certificate enrollment is not available
- `IMPAIRED` - Network connectivity is impaired.

Type: String

Valid Values: `InProgress | Success | Failed | Disabling | Disabled | Impaired`

CaEnrollmentPolicyStatusReason

Additional information explaining the current status of the CA enrollment policy, particularly useful when the policy is in an error or transitional state.

Type: String

DirectoryId

The identifier of the directory associated with this CA enrollment policy.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

LastUpdatedDateTime

The date and time when the CA enrollment policy was last modified or updated.

Type: Timestamp

PcaConnectorArn

The Amazon Resource Name (ARN) of the AWS Private Certificate Authority (PCA) connector that is configured for automatic certificate enrollment in this directory.

Type: String

Pattern: `^arn:[\w-]+:pca-connector-ad:[\w-]+:[0-9]+:connector\/[0-9a-f]{8}(-[0-9a-f]{4}){3}-[0-9a-f]{12}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Describe CA enrollment policy

The following example describes the CA enrollment policy for a directory.

Sample Request

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 45
X-Amz-Target: DirectoryService_20150416.DescribeCAEnrollmentPolicy
X-Amz-Date: 20230815T143000Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20230815/us-west-2/ds/aws4_request,
  SignedHeaders=host;x-amz-date;x-amz-target,
```

```
  Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
  "DirectoryId": "d-926example"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 15 Aug 2023 14:30:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 245
x-amzn-RequestId: 12345678-1234-1234-1234-123456789012

{
  "DirectoryId": "d-926example",
  "PcaConnectorArn": "arn:aws:pca-connector-ad:us-east-1:123456789012:connector/
c-123456789abcdef01",
  "CaEnrollmentPolicyStatus": "SUCCESS",
  "LastUpdatedDateTime": "2023-08-15T14:30:00.000Z",
  "CaEnrollmentPolicyStatusReason": "Policy successfully activated and operational"
}
```

Response when CA enrollment is disabled

If CA enrollment is disabled, this returns an empty response.

Sample Request

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 45
X-Amz-Target: DirectoryService_20150416.DescribeCAEnrollmentPolicy
X-Amz-Date: 20230815T143000Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20230815/us-west-2/ds/aws4_request,
  SignedHeaders=host;x-amz-date;x-amz-target,
  Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
  "DirectoryId": "d-926example"
```

```
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Thu, 10 Aug 2023 09:15:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 156
x-amzn-RequestId: 87654321-4321-4321-4321-210987654321

{}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeCertificate

Displays information about the certificate registered for secure LDAP or client certificate authentication.

Request Syntax

```
{
   "CertificateId": "string",
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CertificateId

The identifier of the certificate.

Type: String

Pattern: `^c-[0-9a-f]{10}$`

Required: Yes

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "Certificate": {
```

```
      "CertificateId": "string",
      "ClientCertAuthSettings": {
         "OCSPUrl": "string"
      },
      "CommonName": "string",
      "ExpiryDateTime": number,
      "RegisteredDateTime": number,
      "State": "string",
      "StateReason": "string",
      "Type": "string"
   }
}
```

Response Elements

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

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

Certificate

Information about the certificate, including registered date time, certificate state, the reason for the state, expiration date time, and certificate common name.

Type: Certificate object

Errors

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

CertificateDoesNotExistException

The certificate is not present in the system for describe or deregister activities.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeClientAuthenticationSettings

Retrieves information about the type of client authentication for the specified directory, if the type is specified. If no type is specified, information about all client authentication types that are supported for the specified directory is retrieved. Currently, only `SmartCard` is supported.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to retrieve information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Limit

The maximum number of items to return. If this value is zero, the maximum number of items is specified by the limitations of the operation.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

NextToken

The *DescribeClientAuthenticationSettingsResult.NextToken* value from a previous call to DescribeClientAuthenticationSettings. Pass null if this is the first call.

Type: String

Required: No

Type

The type of client authentication for which to retrieve information. If no type is specified, a list of all client authentication types that are supported for the specified directory is retrieved.

Type: String

Valid Values: `SmartCard | SmartCardOrPassword`

Required: No

Response Syntax

```
{
   "ClientAuthenticationSettingsInfo": [
      {
         "LastUpdatedDateTime": number,
         "Status": "string",
         "Type": "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.

ClientAuthenticationSettingsInfo

Information about the type of client authentication for the specified directory. The following information is retrieved: The date and time when the status of the client authentication type was last updated, whether the client authentication type is enabled or disabled, and the type of client authentication.

Type: Array of ClientAuthenticationSettingInfo objects

NextToken

The next token used to retrieve the client authentication settings if the number of setting types exceeds page limit and there is another page.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeConditionalForwarders

Obtains information about the conditional forwarders for this account.

If no input parameters are provided for RemoteDomainNames, this request describes all conditional forwarders for the specified directory ID.

Request Syntax

```
{
   "DirectoryId": "string",
   "RemoteDomainNames": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory ID for which to get the list of associated conditional forwarders.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RemoteDomainNames

The fully qualified domain names (FQDN) of the remote domains for which to get the list of associated conditional forwarders. If this member is null, all conditional forwarders are returned.

Type: Array of strings

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: No

Response Syntax

```
{
   "ConditionalForwarders": [
      {
         "DnsIpAddrs": [ "string" ],
         "DnsIpv6Addrs": [ "string" ],
         "RemoteDomainName": "string",
         "ReplicationScope": "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.

ConditionalForwarders

The list of conditional forwarders that have been created.

Type: Array of ConditionalForwarder objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeConditionalForwarders.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 79
X-Amz-Target: DirectoryService_20150416.DescribeConditionalForwarders
X-Amz-Date: 20161214T020215Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=d8f7ff4237b393b4734bbf5d96713dff3deff651b4ab348f64bd776606147f9d

 {
   "DirectoryId": "d-926example",
   "RemoteDomainNames": ["sales.example.com"]
```

```
}
```

Example Response

This example illustrates one usage of DescribeConditionalForwarders.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 56d08425-c1a1-11e6-a132-e5016ac609f4
Content-Type: application/x-amz-json-1.1
Content-Length: 28
Date: Wed, 14 Dec 2016 02:02:18 GMT

{
    "ConditionalForwarders": [
        {
            "RemoteDomainName": "sales.example.com",
            "DnsIpAddrs": [
                "172.30.21.228"
            ],
            "ReplicationScope": "Domain"
        }
    ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)

- AWS SDK for Ruby V3

DescribeDirectories

Obtains information about the directories that belong to this account.

You can retrieve information about specific directories by passing the directory identifiers in the `DirectoryIds` parameter. Otherwise, all directories that belong to the current account are returned.

This operation supports pagination with the use of the `NextToken` request and response parameters. If more results are available, the `DescribeDirectoriesResult.NextToken` member contains a token that you pass in the next call to DescribeDirectories to retrieve the next set of items.

You can also specify a maximum number of return results with the `Limit` parameter.

Request Syntax

```
{
   "DirectoryIds": [ "string" ],
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryIds

A list of identifiers of the directories for which to obtain the information. If this member is null, all directories that belong to the current account are returned.

An empty list results in an `InvalidParameterException` being thrown.

Type: Array of strings

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of items to return. If this value is zero, the maximum number of items is specified by the limitations of the operation.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The `DescribeDirectoriesResult.NextToken` value from a previous call to DescribeDirectories. Pass null if this is the first call.

Type: String

Required: No

Response Syntax

```
{
   "DirectoryDescriptions": [
      {
         "AccessUrl": "string",
         "Alias": "string",
         "ConnectSettings": {
            "AvailabilityZones": [ "string" ],
            "ConnectIps": [ "string" ],
            "ConnectIpsV6": [ "string" ],
            "CustomerUserName": "string",
            "SecurityGroupId": "string",
            "SubnetIds": [ "string" ],
            "VpcId": "string"
         },
         "Description": "string",
         "DesiredNumberOfDomainControllers": number,
         "DirectoryId": "string",
         "DnsIpAddrs": [ "string" ],
         "DnsIpv6Addrs": [ "string" ],
         "Edition": "string",
         "HybridSettings": {
            "SelfManagedDnsIpAddrs": [ "string" ],
```

```
            "SelfManagedInstanceIds": [ "string" ]
         },
         "LaunchTime": number,
         "Name": "string",
         "NetworkType": "string",
         "OsVersion": "string",
         "OwnerDirectoryDescription": {
            "AccountId": "string",
            "DirectoryId": "string",
            "DnsIpAddrs": [ "string" ],
            "DnsIpv6Addrs": [ "string" ],
            "NetworkType": "string",
            "RadiusSettings": {
               "AuthenticationProtocol": "string",
               "DisplayLabel": "string",
               "RadiusPort": number,
               "RadiusRetries": number,
               "RadiusServers": [ "string" ],
               "RadiusServersIpv6": [ "string" ],
               "RadiusTimeout": number,
               "SharedSecret": "string",
               "UseSameUsername": boolean
            },
            "RadiusStatus": "string",
            "VpcSettings": {
               "AvailabilityZones": [ "string" ],
               "SecurityGroupId": "string",
               "SubnetIds": [ "string" ],
               "VpcId": "string"
            }
         },
         "RadiusSettings": {
            "AuthenticationProtocol": "string",
            "DisplayLabel": "string",
            "RadiusPort": number,
            "RadiusRetries": number,
            "RadiusServers": [ "string" ],
            "RadiusServersIpv6": [ "string" ],
            "RadiusTimeout": number,
            "SharedSecret": "string",
            "UseSameUsername": boolean
         },
         "RadiusStatus": "string",
         "RegionsInfo": {
```

```
            "AdditionalRegions": [ "string" ],
            "PrimaryRegion": "string"
         },
         "ShareMethod": "string",
         "ShareNotes": "string",
         "ShareStatus": "string",
         "ShortName": "string",
         "Size": "string",
         "SsoEnabled": boolean,
         "Stage": "string",
         "StageLastUpdatedDateTime": number,
         "StageReason": "string",
         "Type": "string",
         "VpcSettings": {
            "AvailabilityZones": [ "string" ],
            "SecurityGroupId": "string",
            "SubnetIds": [ "string" ],
            "VpcId": "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.

DirectoryDescriptions

The list of available DirectoryDescription objects that were retrieved.

It is possible that this list contains less than the number of items specified in the `Limit` member of the request. This occurs if there are less than the requested number of items left to retrieve, or if the limitations of the operation have been exceeded.

Type: Array of DirectoryDescription objects

NextToken

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent call to DescribeDirectories to retrieve the next set of items.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeDirectories.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 46
X-Amz-Target: DirectoryService_20150416.DescribeDirectories
X-Amz-Date: 20161214T022424Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
```

```
Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
SignedHeaders=content-type;host;x-amz-date;x-amz-target,
Signature=4e138f2c34fe61b203c621e69264a9347db842b944df2eb88fce7e2c337eab8c

{
  "DirectoryIds": "d-926example",
  "Limit": 0
}
```

Example Response

This example illustrates one usage of DescribeDirectories.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 6f884e4a-c1a4-11e6-a099-03078e35561b
Content-Type: application/x-amz-json-1.1
Content-Length: 470
Date: Wed, 14 Dec 2016 02:24:27 GMT

{
   "DirectoryDescriptions":[
      {
         "AccessUrl":"myaccess.awsapps.com",
         "Alias":"myaccess",
         "DirectoryId":"d-926example",
         "DnsIpAddrs":[
            "172.30.21.228",
            "172.30.9.82"
         ],
         "LaunchTime":1.469737584772E9,
         "Name":"corp.example.com",
         "ShortName":"example",
         "SsoEnabled":true,
         "Stage":"Active",
         "StageLastUpdatedDateTime":1.46973913171E9,
         "Type":"MicrosoftAD",
         "VpcSettings":{
            "AvailabilityZones":[
               "us-west-2a",
               "us-west-2b"
            ],
            "SubnetIds":[
               "subnet-ba0146de",
```

```
                "subnet-bef46bc8"
            ],
            "VpcId":"vpc-45025421"
         }
      }
   ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeDirectoryDataAccess

Obtains status of directory data access enablement through the Directory Service Data API for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "DataAccessStatus": "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.

DataAccessStatus

The current status of data access through the Directory Service Data API.

Type: String

Valid Values: `Disabled | Disabling | Enabled | Enabling | Failed`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeDirectoryDataAccess.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 98
X-Amz-Target: DirectoryService_20150416.DescribeDirectoryDataAccess
X-Amz-Date: 20161212T212029Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=477f3a2802dcc303f69499723eb2e29a455fe3d1b646df0dacfd7c005a3a9509

 {
   "DirectoryId":"d-926example"
 }
```

Example Response

This example illustrates one usage of DescribeDirectoryDataAccess.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 21:20:31 GMT

  {
    "DataAccessStatus": "Enabled"
  }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)

- AWS SDK for Ruby V3

DescribeDomainControllers

Provides information about any domain controllers in your directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "DomainControllerIds": [ "string" ],
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier of the directory for which to retrieve the domain controller information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

DomainControllerIds

A list of identifiers for the domain controllers whose information will be provided.

Type: Array of strings

Pattern: `^dc-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The *DescribeDomainControllers.NextToken* value from a previous call to DescribeDomainControllers. Pass null if this is the first call.

Type: String

Required: No

Response Syntax

```
{
   "DomainControllers": [
      {
         "AvailabilityZone": "string",
         "DirectoryId": "string",
         "DnsIpAddr": "string",
         "DnsIpv6Addr": "string",
         "DomainControllerId": "string",
         "LaunchTime": number,
         "Status": "string",
         "StatusLastUpdatedDateTime": number,
         "StatusReason": "string",
         "SubnetId": "string",
         "VpcId": "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.

DomainControllers

List of the DomainController objects that were retrieved.

Type: Array of DomainController objects

NextToken

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent call to DescribeDomainControllers retrieve the next set of items.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeEventTopics

Obtains information about which Amazon SNS topics receive status messages from the specified directory.

If no input parameters are provided, such as DirectoryId or TopicName, this request describes all of the associations in the account.

Request Syntax

```
{
   "DirectoryId": "string",
   "TopicNames": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The Directory ID for which to get the list of associated Amazon SNS topics. If this member is null, associations for all Directory IDs are returned.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

TopicNames

A list of Amazon SNS topic names for which to obtain the information. If this member is null, all associations for the specified Directory ID are returned.

An empty list results in an `InvalidParameterException` being thrown.

Type: Array of strings

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

Pattern: `[a-zA-Z0-9_-]+`

Required: No

Response Syntax

```
{
   "EventTopics": [
      {
         "CreatedDateTime": number,
         "DirectoryId": "string",
         "Status": "string",
         "TopicArn": "string",
         "TopicName": "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.

EventTopics

A list of Amazon SNS topic names that receive status messages from the specified Directory ID.

Type: Array of EventTopic objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeEventTopics.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 66
X-Amz-Target: DirectoryService_20150416.DescribeEventTopics
X-Amz-Date: 20161214T025225Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=d04fcf5cf8439dd8d0503933cab61c2bad6d6b29b9e1e5dca25f6d6de1704e17

 {
   "DirectoryId": "d-926example",
   "TopicNames": "snstopicexample"
 }
```

Example Response

This example illustrates one usage of DescribeEventTopics.

```
HTTP/1.1 200 OK
x-amzn-RequestId: a68a1e79-c19b-11e6-870b-c3330207df37
Content-Type: application/x-amz-json-1.1
Content-Length: 29
Date: Wed, 14 Dec 2016 02:52:27 GMT

{
  "EventTopics": ["eventtopicexample"]
}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeHybridADUpdate

Retrieves information about update activities for a hybrid directory. This operation provides details about configuration changes, administrator account updates, and self-managed instance settings (IDs and DNS IPs).

Request Syntax

```
{
   "DirectoryId": "string",
   "NextToken": "string",
   "UpdateType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the hybrid directory for which to retrieve update information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

NextToken

The pagination token from a previous request to DescribeHybridADUpdate. Pass null if this is the first request.

Type: String

Required: No

UpdateType

The type of update activities to retrieve. Valid values include `SelfManagedInstances` and `HybridAdministratorAccount`.

Type: String

Valid Values: `SelfManagedInstances | HybridAdministratorAccount`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "UpdateActivities": {
      "HybridAdministratorAccount": [
         {
            "AssessmentId": "string",
            "InitiatedBy": "string",
            "LastUpdatedDateTime": number,
            "NewValue": {
               "DnsIps": [ "string" ],
               "InstanceIds": [ "string" ]
            },
            "PreviousValue": {
               "DnsIps": [ "string" ],
               "InstanceIds": [ "string" ]
            },
            "StartTime": number,
            "Status": "string",
            "StatusReason": "string"
         }
      ],
      "SelfManagedInstances": [
         {
            "AssessmentId": "string",
            "InitiatedBy": "string",
            "LastUpdatedDateTime": number,
            "NewValue": {
               "DnsIps": [ "string" ],
               "InstanceIds": [ "string" ]
            },
            "PreviousValue": {
               "DnsIps": [ "string" ],
               "InstanceIds": [ "string" ]
            },
            "StartTime": number,
```

```
            "Status": "string",
            "StatusReason": "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

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent request to retrieve the next set of items.

Type: String

UpdateActivities

Information about update activities for the hybrid directory, organized by update type.

Type: HybridUpdateActivities object

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeHybridADUpdate.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 95
X-Amz-Target: DirectoryService_20150416.DescribeHybridADUpdate
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAIOSFODNN7EXAMPLE/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
    "DirectoryId": "d-926example",
    "UpdateType": "HybridAdministratorAccount"
```

```
}
```

Example Response

This example illustrates one usage of DescribeHybridADUpdate.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 456
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "HybridActivities": {
        "HybridAdministratorAccount": [
            {
                "Status": "UPDATE_REQUESTED",
                "InitiatedBy": "061086805150",
                "StartTime": "2025-07-14T20:27:59.002000-04:00",
                "LastUpdatedDateTime": "2025-07-14T20:27:59.002000-04:00",
                "AssessmentId": "da-1234567890example1"
            }
        ]
    }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeLDAPSSettings

Describes the status of LDAP security for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Limit

Specifies the number of items that should be displayed on one page.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

NextToken

The type of next token used for pagination.

Type: String

Required: No

Type

The type of LDAP security to enable. Currently only the value `Client` is supported.

Type: String

Valid Values: `Client`

Required: No

Response Syntax

```
{
   "LDAPSSettingsInfo": [
      {
         "LastUpdatedDateTime": number,
         "LDAPSStatus": "string",
         "LDAPSStatusReason": "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.

LDAPSSettingsInfo

Information about LDAP security for the specified directory, including status of enablement, state last updated date time, and the reason for the state.

Type: Array of LDAPSSettingInfo objects

NextToken

The next token used to retrieve the LDAPS settings if the number of setting types exceeds page limit and there is another page.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeRegions

Provides information about the Regions that are configured for multi-Region replication.

Request Syntax

```
{
   "DirectoryId": "string",
   "NextToken": "string",
   "RegionName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

NextToken

The `DescribeRegionsResult.NextToken` value from a previous call to DescribeRegions. Pass null if this is the first call.

Type: String

Required: No

RegionName

The name of the Region. For example, `us-east-1`.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "RegionsDescription": [
      {
         "DesiredNumberOfDomainControllers": number,
         "DirectoryId": "string",
         "LastUpdatedDateTime": number,
         "LaunchTime": number,
         "RegionName": "string",
         "RegionType": "string",
         "Status": "string",
         "StatusLastUpdatedDateTime": number,
         "VpcSettings": {
            "SubnetIds": [ "string" ],
            "VpcId": "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

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent call to DescribeRegions to retrieve the next set of items.

Type: String

RegionsDescription

List of Region information related to the directory for each replicated Region.

Type: Array of RegionDescription objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeSettings

Retrieves information about the configurable settings for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "NextToken": "string",
   "Status": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to retrieve information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

NextToken

The `DescribeSettingsResult.NextToken` value from a previous call to DescribeSettings. Pass null if this is the first call.

Type: String

Required: No

Status

The status of the directory settings for which to retrieve information.

Type: String

Valid Values: `Requested | Updating | Updated | Failed | Default`

Required: No

Response Syntax

```
{
   "DirectoryId": "string",
   "NextToken": "string",
   "SettingEntries": [
      {
         "AllowedValues": "string",
         "AppliedValue": "string",
         "DataType": "string",
         "LastRequestedDateTime": number,
         "LastUpdatedDateTime": number,
         "Name": "string",
         "RequestDetailedStatus": {
            "string" : "string"
         },
         "RequestedValue": "string",
         "RequestStatus": "string",
         "RequestStatusMessage": "string",
         "Type": "string"
      }
   ]
}
```

Response Elements

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

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

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

NextToken

If not null, token that indicates that more results are available. Pass this value for the `NextToken` parameter in a subsequent call to `DescribeSettings` to retrieve the next set of items.

Type: String

SettingEntries

The list of SettingEntry objects that were retrieved.

It is possible that this list contains less than the number of items specified in the `Limit` member of the request. This occurs if there are less than the requested number of items left to retrieve, or if the limitations of the operation have been exceeded.

Type: Array of SettingEntry objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeSharedDirectories

Returns the shared directories in your account.

Request Syntax

```
{
   "Limit": number,
   "NextToken": "string",
   "OwnerDirectoryId": "string",
   "SharedDirectoryIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Limit

The number of shared directories to return in the response object.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The `DescribeSharedDirectoriesResult.NextToken` value from a previous call to DescribeSharedDirectories. Pass null if this is the first call.

Type: String

Required: No

OwnerDirectoryId

Returns the identifier of the directory in the directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

SharedDirectoryIds

A list of identifiers of all shared directories in your account.

Type: Array of strings

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "SharedDirectories": [
      {
         "CreatedDateTime": number,
         "LastUpdatedDateTime": number,
         "OwnerAccountId": "string",
         "OwnerDirectoryId": "string",
         "SharedAccountId": "string",
         "SharedDirectoryId": "string",
         "ShareMethod": "string",
         "ShareNotes": "string",
         "ShareStatus": "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

If not null, token that indicates that more results are available. Pass this value for the `NextToken` parameter in a subsequent call to DescribeSharedDirectories to retrieve the next set of items.

Type: String

SharedDirectories

A list of all shared directories in your account.

Type: Array of SharedDirectory objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeSnapshots

Obtains information about the directory snapshots that belong to this account.

This operation supports pagination with the use of the *NextToken* request and response parameters. If more results are available, the *DescribeSnapshots.NextToken* member contains a token that you pass in the next call to DescribeSnapshots to retrieve the next set of items.

You can also specify a maximum number of return results with the *Limit* parameter.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string",
   "SnapshotIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to retrieve snapshot information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of objects to return.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The *DescribeSnapshotsResult.NextToken* value from a previous call to DescribeSnapshots. Pass null if this is the first call.

Type: String

Required: No

SnapshotIds

A list of identifiers of the snapshots to obtain the information for. If this member is null or empty, all snapshots are returned using the *Limit* and *NextToken* members.

Type: Array of strings

Pattern: `^s-[0-9a-f]{10}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Snapshots": [
      {
         "DirectoryId": "string",
         "Name": "string",
         "SnapshotId": "string",
         "StartTime": number,
         "Status": "string",
         "Type": "string"
      }
   ]
}
```

Response Elements

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

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

NextToken

If not null, more results are available. Pass this value in the *NextToken* member of a subsequent call to DescribeSnapshots.

Type: String

Snapshots

The list of Snapshot objects that were retrieved.

It is possible that this list contains less than the number of items specified in the *Limit* member of the request. This occurs if there are less than the requested number of items left to retrieve, or if the limitations of the operation have been exceeded.

Type: Array of Snapshot objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeSnapshots.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 76
X-Amz-Target: DirectoryService_20150416.DescribeSnapshots
X-Amz-Date: 20161214T164618Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=602552c456c471537cbafaec3b7712674bdc20574c076dace469f3848fa8ab7a

 {
   "DirectoryId": "d-926example",
   "Limit": 0,
   "SnapshotIds": ["s-9267f6da4e"]
 }
```

Example Response

This example illustrates one usage of DescribeSnapshots.

```
HTTP/1.1 200 OK
x-amzn-RequestId: d7b33e7e-c21c-11e6-91f4-6dbff6648f8a
Content-Type: application/x-amz-json-1.1
Content-Length: 138
Date: Wed, 14 Dec 2016 16:46:21 GMT

{
   "Snapshots":[
      {
         "DirectoryId":"d-926example",
         "SnapshotId":"s-9267f6da4e",
         "StartTime":1.481289211615E9,
         "Status":"Completed",
         "Type":"Auto"
      }
   ]
```

```
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeTrusts

Obtains information about the trust relationships for this account.

If no input parameters are provided, such as DirectoryId or TrustIds, this request describes all the trust relationships belonging to the account.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string",
   "TrustIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The Directory ID of the AWS directory that is a part of the requested trust relationship.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of objects to return.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The *DescribeTrustsResult.NextToken* value from a previous call to DescribeTrusts. Pass null if this is the first call.

Type: String

Required: No

TrustIds

A list of identifiers of the trust relationships for which to obtain the information. If this member is null, all trust relationships that belong to the current account are returned.

An empty list results in an `InvalidParameterException` being thrown.

Type: Array of strings

Pattern: `^t-[0-9a-f]{10}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Trusts": [
      {
         "CreatedDateTime": number,
         "DirectoryId": "string",
         "LastUpdatedDateTime": number,
         "RemoteDomainName": "string",
         "SelectiveAuth": "string",
         "StateLastUpdatedDateTime": number,
         "TrustDirection": "string",
         "TrustId": "string",
         "TrustState": "string",
         "TrustStateReason": "string",
         "TrustType": "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

If not null, more results are available. Pass this value for the *NextToken* parameter in a subsequent call to DescribeTrusts to retrieve the next set of items.

Type: String

Trusts

The list of Trust objects that were retrieved.

It is possible that this list contains less than the number of items specified in the *Limit* member of the request. This occurs if there are less than the requested number of items left to retrieve, or if the limitations of the operation have been exceeded.

Type: Array of Trust objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DescribeTrusts.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 61
X-Amz-Target: DirectoryService_20150416.DescribeTrusts
X-Amz-Date: 20161214T210907Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=fc201f050b631958cf6c5e186c5c897e82a974dad41b0e3c141a811003fa3c9b

 {
   "DirectoryId":"d-926example",
   "TrustIds": ["t-9267353df0"]
 }
```

Example Response

This example illustrates one usage of DescribeTrusts.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 8e6560bd-c241-11e6-a4dc-e5519684970a
Content-Type: application/x-amz-json-1.1
Content-Length: 406
Date: Wed, 14 Dec 2016 21:09:09 GMT
```

```
{
  "Trusts": [
    {
      "CreatedDateTime": 1481749250.657,
      "DirectoryId": "d-926example",
      "LastUpdatedDateTime": 1481749260.156,
      "RemoteDomainName": "sales.example.com",
      "StateLastUpdatedDateTime": 1481749260.156,
      "TrustDirection": "One-Way: Outgoing",
      "TrustId": "t-9267353df0",
      "TrustState": "Failed",
      "TrustStateReason": "The specified domain either does not exist or could not be
contacted. Name: sales.example.com",
      "TrustType": "Forest"
    }
  ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DescribeUpdateDirectory

Describes the updates of a directory for a particular update type.

Request Syntax

```
{
   "DirectoryId": "string",
   "NextToken": "string",
   "RegionName": "string",
   "UpdateType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The unique identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

NextToken

The `DescribeUpdateDirectoryResult`. NextToken value from a previous call to DescribeUpdateDirectory. Pass null if this is the first call.

Type: String

Required: No

RegionName

The name of the Region.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

UpdateType

The type of updates you want to describe for the directory.

Type: String

Valid Values: `OS | NETWORK | SIZE`

Required: Yes

Response Syntax

```
{
   "NextToken": "string",
   "UpdateActivities": [
      {
         "InitiatedBy": "string",
         "LastUpdatedDateTime": number,
         "NewValue": {
            "OSUpdateSettings": {
               "OSVersion": "string"
            }
         },
         "PreviousValue": {
            "OSUpdateSettings": {
               "OSVersion": "string"
            }
         },
         "Region": "string",
         "StartTime": number,
         "Status": "string",
         "StatusReason": "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

If not null, more results are available. Pass this value for the `NextToken` parameter.

Type: String

UpdateActivities

The list of update activities on a directory for the requested update type.

Type: Array of UpdateInfoEntry objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableCAEnrollmentPolicy

Disables the certificate authority (CA) enrollment policy for the specified directory. This stops automatic certificate enrollment and management for domain-joined clients, but does not affect existing certificates.

> **Important**
>
> Disabling the CA enrollment policy prevents new certificates from being automatically enrolled, but existing certificates remain valid and functional until they expire.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to disable the CA enrollment policy.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DisableAlreadyInProgressException

A disable operation for CA enrollment policy is already in progress for this directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Disable CA enrollment policy

The following example disables the CA enrollment policy for a directory.

Sample Request

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 45
X-Amz-Target: DirectoryService_20150416.DisableCAEnrollmentPolicy
X-Amz-Date: 20230815T143000Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20230815/us-west-2/ds/aws4_request,
  SignedHeaders=host;x-amz-date;x-amz-target,
  Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
  "DirectoryId": "d-926example"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 15 Aug 2023 14:30:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 2
```

```
x-amzn-RequestId: 12345678-1234-1234-1234-123456789012

{}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableClientAuthentication

Disables alternative client authentication methods for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Type

The type of client authentication to disable. Currently the only parameter `"SmartCard"` is supported.

Type: String

Valid Values: `SmartCard | SmartCardOrPassword`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidClientAuthStatusException

Client authentication is already enabled.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableDirectoryDataAccess

Deactivates access to directory data via the Directory Service Data API for the specified directory. For more information, see Directory Service Data API Reference.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryInDesiredStateException

The directory is already updated to desired update type settings.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DisableDirectoryDataAccess.

```
POST / HTTP/1.1
```

```
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 98
X-Amz-Target: DirectoryService_20150416.DisableDirectoryDataAccess
X-Amz-Date: 20161212T212029Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=477f3a2802dcc303f69499723eb2e29a455fe3d1b646df0dacfd7c005a3a9509

 {
   "DirectoryId":"d-926example"
 }
```

Example Response

This example illustrates one usage of DisableDirectoryDataAccess.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 21:20:31 GMT

 {
 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableLDAPS

Deactivates LDAP secure calls for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Type

The type of LDAP security to enable. Currently only the value `Client` is supported.

Type: String

Valid Values: `Client`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidLDAPSStatusException

The LDAP activities could not be performed because they are limited by the LDAPS status.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableRadius

Disables multi-factor authentication (MFA) with the Remote Authentication Dial In User Service (RADIUS) server for an AD Connector or Microsoft AD directory.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to disable MFA.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DisableRadius.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
```

```
X-Amz-Target: DirectoryService_20150416.DisableRadius
X-Amz-Date: 20161214T215510Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=c7ae53fed950cedb5cc393489a79a60b9c548ee85c9c2339f8a75108a2d18525

 {
   "DirectoryId": "d-926example"
 }
```

Example Response

This example illustrates one usage of DisableRadius.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fcd40ac9-c247-11e6-a7ca-f9a52a6a0390
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 21:55:12 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

DisableSso

Disables single-sign on for a directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Password": "string",
   "UserName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to disable single-sign on.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Password

The password of an alternate account to use to disable single-sign on. This is only used for AD Connector directories. For more information, see the *UserName* parameter.

Type: String

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

Required: No

UserName

The username of an alternate account to use to disable single-sign on. This is only used for AD Connector directories. This account must have privileges to remove a service principal name.

If the AD Connector service account does not have privileges to remove a service principal name, you can specify an alternate account with the *UserName* and *Password* parameters. These

credentials are only used to disable single sign-on and are not stored by the service. The AD Connector service account is not changed.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[a-zA-Z0-9._-]+`

Required: No

Response Elements

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

Errors

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

AuthenticationFailedException

An authentication error occurred.

Message

The textual message for the exception.

RequestId

The identifier of the request that caused the exception.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InsufficientPermissionsException

The account does not have sufficient permission to perform the operation.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of DisableSso.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 80
X-Amz-Target: DirectoryService_20150416.DisableSso
X-Amz-Date: 20161214T221722Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=b68ee7e88af7fc741471e9098dbc1636979ae461f0b9cd2f187124abbf762455

 {
   "UserName": "Admin",
   "DirectoryId": "d-926example",
   "Password": "Str0ngP@ssw0rd"
 }
```

Example Response

This example illustrates one usage of DisableSso.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fcd40ac9-c247-11e6-a7ca-f9a52a6a0390
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 22:17:12 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

EnableCAEnrollmentPolicy

Enables certificate authority (CA) enrollment policy for the specified directory. This allows domain-joined clients to automatically request and receive certificates from the specified AWS Private Certificate Authority.

> **Note**
>
> Before enabling CA enrollment, ensure that the PCA connector is properly configured and accessible from the directory. The connector must be in an active state and have the necessary permissions.

Request Syntax

```
{
   "DirectoryId": "string",
   "PcaConnectorArn": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to enable the CA enrollment policy.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

PcaConnectorArn

The Amazon Resource Name (ARN) of the Private Certificate Authority (PCA) connector to use for automatic certificate enrollment. This connector must be properly configured and accessible from the directory.

The ARN format is: `arn:aws:pca-connector-ad:`*`region`*`:`*`account-id`*`:connector/`*`connector-id`*

Type: String

Pattern: `^arn:[\w-]+:pca-connector-ad:[\w-]+:[0-9]+:connector\/[0-9a-f]{8}(-[0-9a-f]{4}){3}-[0-9a-f]{12}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EnableAlreadyInProgressException

An enable operation for CA enrollment policy is already in progress for this directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Enable CA enrollment policy

The following example enables the CA enrollment policy for a directory with a specified PCA connector.

Sample Request

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 156
X-Amz-Target: DirectoryService_20150416.EnableCAEnrollmentPolicy
X-Amz-Date: 20230815T143000Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20230815/us-west-2/ds/aws4_request,
  SignedHeaders=host;x-amz-date;x-amz-target,
  Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
  "DirectoryId": "d-926example",
  "PcaConnectorArn": "arn:aws:pca-connector-ad:us-east-1:123456789012:connector/
c-123456789abcdef01"
}
```

Sample Response

```
HTTP/1.1 200 OK
Date: Tue, 15 Aug 2023 14:30:00 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 2
x-amzn-RequestId: 12345678-1234-1234-1234-123456789012

{}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

EnableClientAuthentication

Enables alternative client authentication methods for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the specified directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Type

The type of client authentication to enable. Currently only the value `SmartCard` is supported. Smart card authentication in AD Connector requires that you enable Kerberos Constrained Delegation for the Service User to the LDAP service in your self-managed AD.

Type: String

Valid Values: `SmartCard | SmartCardOrPassword`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidClientAuthStatusException

Client authentication is already enabled.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

NoAvailableCertificateException

Client authentication setup could not be completed because at least one valid certificate must be registered in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

EnableDirectoryDataAccess

Enables access to directory data via the Directory Service Data API for the specified directory. For more information, see Directory Service Data API Reference.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryInDesiredStateException

The directory is already updated to desired update type settings.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of EnableDirectoryDataAccess.

```
POST / HTTP/1.1
```

```
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 98
X-Amz-Target: DirectoryService_20150416.EnableDirectoryDataAccess
X-Amz-Date: 20161212T212029Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=477f3a2802dcc303f69499723eb2e29a455fe3d1b646df0dacfd7c005a3a9509

 {
   "DirectoryId":"d-926example"
 }
```

Example Response

This example illustrates one usage of EnableDirectoryDataAccess.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Mon, 12 Dec 2016 21:20:31 GMT

 {
 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

EnableLDAPS

Activates the switch for the specific directory to always use LDAP secure calls.

Request Syntax

```
{
   "DirectoryId": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Type

The type of LDAP security to enable. Currently only the value `Client` is supported.

Type: String

Valid Values: `Client`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidLDAPSStatusException

The LDAP activities could not be performed because they are limited by the LDAPS status.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

NoAvailableCertificateException

Client authentication setup could not be completed because at least one valid certificate must be registered in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

EnableRadius

Enables multi-factor authentication (MFA) with the Remote Authentication Dial In User Service (RADIUS) server for an AD Connector or Microsoft AD directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "RadiusSettings": {
      "AuthenticationProtocol": "string",
      "DisplayLabel": "string",
      "RadiusPort": number,
      "RadiusRetries": number,
      "RadiusServers": [ "string" ],
      "RadiusServersIpv6": [ "string" ],
      "RadiusTimeout": number,
      "SharedSecret": "string",
      "UseSameUsername": boolean
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to enable MFA.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RadiusSettings

A RadiusSettings object that contains information about the RADIUS server.

Type: RadiusSettings object

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityAlreadyExistsException

The specified entity already exists.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of EnableRadius.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 259
X-Amz-Target: DirectoryService_20150416.EnableRadius
X-Amz-Date: 20161214T214103Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=4ba918cf440a45fddd5fcd1bd65207f94e760cebbd7de404d0096c6b1e652d4e

{
   "DirectoryId":"d-926example",
   "RadiusSettings":{
      "DisplayLabel":"MyRadius",
      "UseSameUsername":true,
      "RadiusTimeout":1,
      "AuthenticationProtocol":"PAP",
      "RadiusPort":1200,
      "RadiusRetries":2,
      "SharedSecret":"12345678",
      "RadiusServers":[
         "172.168.111.12"
      ]
   }
}
```

Example Response

This example illustrates one usage of EnableRadius.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 045cabd8-c246-11e6-ad7a-a9557d30f017
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 21:41:05 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4

- 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 (Boto3)
- AWS SDK for Ruby V3

EnableSso

Enables single sign-on for a directory. Single sign-on allows users in your directory to access certain AWS services from a computer joined to the directory without having to enter their credentials separately.

Request Syntax

```
{
   "DirectoryId": "string",
   "Password": "string",
   "UserName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to enable single-sign on.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Password

The password of an alternate account to use to enable single-sign on. This is only used for AD Connector directories. For more information, see the *UserName* parameter.

Type: String

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

Required: No

UserName

The username of an alternate account to use to enable single-sign on. This is only used for AD Connector directories. This account must have privileges to add a service principal name.

If the AD Connector service account does not have privileges to add a service principal name, you can specify an alternate account with the *UserName* and *Password* parameters. These credentials are only used to enable single sign-on and are not stored by the service. The AD Connector service account is not changed.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[a-zA-Z0-9._-]+`

Required: No

Response Elements

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

Errors

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

AuthenticationFailedException

An authentication error occurred.

Message

The textual message for the exception.

RequestId

The identifier of the request that caused the exception.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InsufficientPermissionsException

The account does not have sufficient permission to perform the operation.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of EnableSso.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 80
X-Amz-Target: DirectoryService_20150416.EnableSso
X-Amz-Date: 20161214T220301Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=88acc99818605aa438eb86b5be59daecce370c7db16e5e84311508e575ea0515

 {
   "UserName": "Admin",
   "DirectoryId": "d-926example",
   "Password": "Str0ngP@ssw0rd"
 }
```

Example Response

This example illustrates one usage of EnableSso.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fcd40ac9-c247-11e6-a7ca-f9a52a6a0390
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 22:03:03 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

GetDirectoryLimits

Obtains directory limit information for the current Region.

Response Syntax

```
{
   "DirectoryLimits": {
      "CloudOnlyDirectoriesCurrentCount": number,
      "CloudOnlyDirectoriesLimit": number,
      "CloudOnlyDirectoriesLimitReached": boolean,
      "CloudOnlyMicrosoftADCurrentCount": number,
      "CloudOnlyMicrosoftADLimit": number,
      "CloudOnlyMicrosoftADLimitReached": boolean,
      "ConnectedDirectoriesCurrentCount": number,
      "ConnectedDirectoriesLimit": number,
      "ConnectedDirectoriesLimitReached": boolean
   }
}
```

Response Elements

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

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

DirectoryLimits

A DirectoryLimits object that contains the directory limits for the current Region.

Type: DirectoryLimits object

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of GetDirectoryLimits.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
```

```
Content-Length: 2
X-Amz-Target: DirectoryService_20150416.GetDirectoryLimits
X-Amz-Date: 20161214T223512Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=550da3fb7986c02e54cb35d644fd6601bfe823c3956e9471308682df2c1977ac

 {

 }
```

Example Response

This example illustrates one usage of GetDirectoryLimits.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 9526b149-c24d-11e6-bc3e-5ffd5f600cd8
Content-Type: application/x-amz-json-1.1
Content-Length: 348
Date: Wed, 14 Dec 2016 22:35:14 GMT

{
   "DirectoryLimits":{
      "CloudOnlyDirectoriesCurrentCount":2,
      "CloudOnlyDirectoriesLimit":10,
      "CloudOnlyDirectoriesLimitReached":false,
      "CloudOnlyMicrosoftADCurrentCount":2,
      "CloudOnlyMicrosoftADLimit":10,
      "CloudOnlyMicrosoftADLimitReached":false,
      "ConnectedDirectoriesCurrentCount":1,
      "ConnectedDirectoriesLimit":10,
      "ConnectedDirectoriesLimitReached":false
   }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

GetSnapshotLimits

Obtains the manual snapshot limits for a directory.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Contains the identifier of the directory to obtain the limits for.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "SnapshotLimits": {
      "ManualSnapshotsCurrentCount": number,
      "ManualSnapshotsLimit": number,
      "ManualSnapshotsLimitReached": boolean
   }
}
```

Response Elements

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

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

SnapshotLimits

A SnapshotLimits object that contains the manual snapshot limits for the specified directory.

Type: SnapshotLimits object

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of GetSnapshotLimits.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
X-Amz-Target: DirectoryService_20150416.GetSnapshotLimits
X-Amz-Date: 20161214T224507Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=f9ba790cf905e14fa97fd1ed6a961c72d83a23f3e54ab126d8e4a30ec14d3cdb

 {
   "DirectoryId": "d-926example"
 }
```

Example Response

This example illustrates one usage of GetSnapshotLimits.

```
HTTP/1.1 200 OK
x-amzn-RequestId: f7895979-c24e-11e6-a0ba-6bb2a89ebc49
Content-Type: application/x-amz-json-1.1
Content-Length: 113
Date: Wed, 14 Dec 2016 22:45:09 GMT

{
```

```
   "SnapshotLimits":{
      "ManualSnapshotsCurrentCount":1,
      "ManualSnapshotsLimit":5,
      "ManualSnapshotsLimitReached":false
   }
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ListADAssessments

Retrieves a list of directory assessments for the specified directory or all assessments in your account. Use this operation to monitor assessment status and manage multiple assessments.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to list assessments. If not specified, all assessments in your account are returned.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of assessment summaries to return.

Type: Integer

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

Required: No

NextToken

The pagination token from a previous request to ListADAssessments. Pass null if this is the first request.

Type: String

Required: No

Response Syntax

```
{
   "Assessments": [
      {
         "AssessmentId": "string",
         "CustomerDnsIps": [ "string" ],
         "DirectoryId": "string",
         "DnsName": "string",
         "LastUpdateDateTime": number,
         "ReportType": "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.

Assessments

A list of assessment summaries containing basic information about each directory assessment.

Type: Array of AssessmentSummary objects

NextToken

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent request to retrieve the next set of items.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of ListADAssessments.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 75
X-Amz-Target: DirectoryService_20150416.ListADAssessments
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
    "DirectoryId": "d-926example"
```

```
}
```

Example Response

This example illustrates one usage of ListADAssessments.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 524
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "Assessments": [{
            "AssessmentId": "da-1234567890example1",
            "DirectoryId": "d-926example",
            "DnsName": "ad.example.com",
            "StartTime": "2025-06-15T23:21:49.074000-04:00",
            "LastUpdateDateTime": "2025-06-16T16:42:54.861000-04:00",
            "Status": "SUCCESS",
            "CustomerDnsIps": [
                "10.24.34.100",
                "10.24.34.200"
            ],
            "ReportType": "SYSTEM"
        },
        {
            "AssessmentId": "da-09876543210example2",
            "DirectoryId": "d-926example",
            "DnsName": "ad.example.com",
            "StartTime": "2025-06-10T14:28:54.934000-04:00",
            "LastUpdateDateTime": "2025-06-10T14:55:52.197000-04:00",
            "Status": "FAILED",
            "CustomerDnsIps": [
                "10.24.34.100",
                "10.24.34.200"
            ],
            "ReportType": "CUSTOMER"
        }
    ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ListCertificates

For the specified directory, lists all the certificates registered for a secure LDAP or client certificate authentication.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Limit

The number of items that should show up on one page

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

NextToken

A token for requesting another page of certificates if the `NextToken` response element indicates that more certificates are available. Use the value of the returned `NextToken` element in your request until the token comes back as `null`. Pass `null` if this is the first call.

Type: String

Required: No

Response Syntax

```
{
   "CertificatesInfo": [
      {
         "CertificateId": "string",
         "CommonName": "string",
         "ExpiryDateTime": number,
         "State": "string",
         "Type": "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.

CertificatesInfo

A list of certificates with basic details including certificate ID, certificate common name, certificate state.

Type: Array of CertificateInfo objects

NextToken

Indicates whether another page of certificates is available when the number of available certificates exceeds the page limit.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ListIpRoutes

Lists the address blocks that you have added to a directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier (ID) of the directory for which you want to retrieve the IP addresses.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Limit

Maximum number of items to return. If this value is zero, the maximum number of items is specified by the limitations of the operation.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The *ListIpRoutes.NextToken* value from a previous call to ListIpRoutes. Pass null if this is the first call.

Type: String

Required: No

Response Syntax

```
{
   "IpRoutesInfo": [
      {
         "AddedDateTime": number,
         "CidrIp": "string",
         "CidrIpv6": "string",
         "Description": "string",
         "DirectoryId": "string",
         "IpRouteStatusMsg": "string",
         "IpRouteStatusReason": "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.

IpRoutesInfo

A list of IpRoutes.

Type: Array of IpRouteInfo objects

NextToken

If not null, more results are available. Pass this value for the *NextToken* parameter in a subsequent call to ListIpRoutes to retrieve the next set of items.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of ListIpRoutes.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 43
X-Amz-Target: DirectoryService_20150416.ListIpRoutes
X-Amz-Date: 20161214T225328Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=4dcb72aae179937790f5b061ceb1c697ac434b27891014b609671e49e52be1dd

 {
   "DirectoryId":"d-926example",
   "Limit": 0
```

```
}
```

Example Response

This example illustrates one usage of ListIpRoutes.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 2214ceaa-c250-11e6-a7ca-f9a52a6a0390
Content-Type: application/x-amz-json-1.1
Content-Length: 155
Date: Wed, 14 Dec 2016 22:53:30 GMT

{
   "IpRoutesInfo":[
      {
         "AddedDateTime":1.48157763163E9,
         "CidrIp":"12.12.12.12/32",
         "Description":"example",
         "DirectoryId":"d-926example",
         "IpRouteStatusMsg":"Added"
      }
   ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)

- AWS SDK for Ruby V3

ListLogSubscriptions

Lists the active log subscriptions for the AWS account.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

If a *DirectoryID* is provided, lists only the log subscription associated with that directory. If no *DirectoryId* is provided, lists all log subscriptions associated with your AWS account. If there are no log subscriptions for the AWS account or the directory, an empty list will be returned.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Limit

The maximum number of items returned.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The token for the next set of items to return.

Type: String

Required: No

Response Syntax

```
{
   "LogSubscriptions": [
      {
         "DirectoryId": "string",
         "LogGroupName": "string",
         "SubscriptionCreatedDateTime": 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.

LogSubscriptions

A list of active LogSubscription objects for calling the AWS account.

Type: Array of LogSubscription objects

NextToken

The token for the next set of items to return.

Type: String

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ListSchemaExtensions

Lists all schema extensions applied to a Microsoft AD Directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory from which to retrieve the schema extension information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Limit

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

The `ListSchemaExtensions.NextToken` value from a previous call to `ListSchemaExtensions`. Pass null if this is the first call.

Type: String

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "SchemaExtensionsInfo": [
      {
         "Description": "string",
         "DirectoryId": "string",
         "EndDateTime": number,
         "SchemaExtensionId": "string",
         "SchemaExtensionStatus": "string",
         "SchemaExtensionStatusReason": "string",
         "StartDateTime": 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

If not null, more results are available. Pass this value for the `NextToken` parameter in a subsequent call to `ListSchemaExtensions` to retrieve the next set of items.

Type: String

SchemaExtensionsInfo

Information about the schema extensions applied to the directory.

Type: Array of SchemaExtensionInfo objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of ListSchemaExtensions.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 43
X-Amz-Target: DirectoryService_20150416.ListSchemaExtensions
X-Amz-Date: 20161214T230332Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=39aa3aec95444a9bf6dff7fc57d3178c9364b5d2fd560380e8fbc6eee13b3cf1

 {
   "DirectoryId": "d-926example",
   "Limit": 0
 }
```

Example Response

This example illustrates one usage of ListSchemaExtensions.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 89f9aea0-c251-11e6-b0d6-83af322c90cd
Content-Type: application/x-amz-json-1.1
Content-Length: 333
Date: Wed, 14 Dec 2016 23:03:34 GMT
```

```
{
   "SchemaExtensionsInfo":[
      {
         "Description":"example text",
         "DirectoryId":"d-926example",
         "EndDateTime":1.481586088301E9,
         "SchemaExtensionId":"e-926731d2a0",
         "SchemaExtensionStatus":"Cancelled",
         "SchemaExtensionStatusReason":"Cancellation is complete. No schema updates
 were applied to your directory.",
         "StartDateTime":1.481584463548E9
      }
   ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ListTagsForResource

Lists all tags on a directory.

Request Syntax

```
{
   "Limit": number,
   "NextToken": "string",
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Limit

Reserved for future use.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

NextToken

Reserved for future use.

Type: String

Required: No

ResourceId

Identifier (ID) of the directory for which you want to retrieve tags.

Type: String

Pattern: `^[d]-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "NextToken": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Response Elements

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

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

NextToken

Reserved for future use.

Type: String

Tags

List of tags returned by the ListTagsForResource operation.

Type: Array of Tag objects

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidNextTokenException

The `NextToken` value is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of ListTagsForResource.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 42
X-Amz-Target: DirectoryService_20150416.ListTagsForResource
X-Amz-Date: 20161214T231352Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=72d8e8988d5a206b4e218f406544b06cb4f6fd9d8927a270317509c9861b0826

 {
   "ResourceId":"d-926example",
   "Limit": 0
 }
```

Example Response

This example illustrates one usage of ListTagsForResource.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fb7da12c-c252-11e6-a96d-2b0686697d23
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 53
Date: Wed, 14 Dec 2016 23:13:54 GMT

{
   "Tags":[
      {
         "Key":"environment",
         "Value":"production"
      }
   ]
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RegisterCertificate

Registers a certificate for a secure LDAP or client certificate authentication.

Request Syntax

```
{
   "CertificateData": "string",
   "ClientCertAuthSettings": {
      "OCSPUrl": "string"
   },
   "DirectoryId": "string",
   "Type": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CertificateData

The certificate PEM string that needs to be registered.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8192.

Required: Yes

ClientCertAuthSettings

A `ClientCertAuthSettings` object that contains client certificate authentication settings.

Type: ClientCertAuthSettings object

Required: No

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Type

The function that the registered certificate performs. Valid values include `ClientLDAPS` or `ClientCertAuth`. The default value is `ClientLDAPS`.

Type: String

Valid Values: `ClientCertAuth | ClientLDAPS`

Required: No

Response Syntax

```
{
   "CertificateId": "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.

CertificateId

The identifier of the certificate.

Type: String

Pattern: `^c-[0-9a-f]{10}$`

Errors

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

CertificateAlreadyExistsException

The certificate has already been registered into the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

CertificateLimitExceededException

The certificate could not be added because the certificate limit has been reached.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidCertificateException

The certificate PEM that was provided has incorrect encoding.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RegisterEventTopic

Associates a directory with an Amazon SNS topic. This establishes the directory as a publisher to the specified Amazon SNS topic. You can then receive email or text (SMS) messages when the status of your directory changes. You get notified if your directory goes from an Active status to an Impaired or Inoperable status. You also receive a notification when the directory returns to an Active status.

Request Syntax

```
{
   "DirectoryId": "string",
   "TopicName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The Directory ID that will publish status messages to the Amazon SNS topic.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

TopicName

The Amazon SNS topic name to which the directory will publish status messages. This Amazon SNS topic must be in the same region as the specified Directory ID.

Type: String

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

Pattern: `[a-zA-Z0-9_-]+`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of RegisterEventTopic.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 63
X-Amz-Target: DirectoryService_20150416.RegisterEventTopic
X-Amz-Date: 20161214T232258Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=6e1e2996789f568cf057fa66e70b1ba114d7388510787be6092055ab97a07828

 {
   "DirectoryId": "d-926example",
   "TopicName": "snstopicexample"
 }
```

Example Response

This example illustrates one usage of RegisterEventTopic.

```
HTTP/1.1 200 OK
x-amzn-RequestId: a68a1e79-c19b-11e6-870b-c3330207df37
Content-Type: application/x-amz-json-1.1
Content-Length: 29
Date: Wed, 14 Dec 2016 23:23:01 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RejectSharedDirectory

Rejects a directory sharing request that was sent from the directory owner account.

Request Syntax

```
{
   "SharedDirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SharedDirectoryId

Identifier of the shared directory in the directory consumer account. This identifier is different for each directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "SharedDirectoryId": "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.

SharedDirectoryId

Identifier of the shared directory in the directory consumer account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryAlreadySharedException

The specified directory has already been shared with this AWS account.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RemoveIpRoutes

Removes IP address blocks from a directory.

Request Syntax

```
{
   "CidrIps": [ "string" ],
   "CidrIpv6s": [ "string" ],
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CidrIps

IP address blocks that you want to remove.

Type: Array of strings

Pattern: `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])(\/([1-9]|[1-2][0-9]|3[0-2]))$`

Required: No

CidrIpv6s

IPv6 address blocks that you want to remove.

Type: Array of strings

Pattern: `^((([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,7}:)|(([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2})|(([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3})|(([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4})|(([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5})|([0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6}))|(:((:[0-9a-fA-F]{1,4}){1,7}|:)))\/(12[0-8]|1[01][0-9]|[1-9]?[0-9])$`

Required: No

DirectoryId

Identifier (ID) of the directory from which you want to remove the IP addresses.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of RemoveIpRoutes.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 62
X-Amz-Target: DirectoryService_20150416.RemoveIpRoutes
X-Amz-Date: 20161214T233152Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=b3413802dda807a99b3a5783eef6fc3599eefa200820af9842cc5b24becb1802

 {
   "DirectoryId":"d-926example",
   "CidrIps": ["12.12.12.12/32"]
 }
```

Example Response

This example illustrates one usage of RemoveIpRoutes.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 7f62aa28-c255-11e6-b3d3-bf8f15b8b2ee
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 23:31:54 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RemoveRegion

Stops all replication and removes the domain controllers from the specified Region. You cannot remove the primary Region with this operation. Instead, use the `DeleteDirectory` API.

Request Syntax

```
{
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which you want to remove Region replication.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RemoveTagsFromResource

Removes tags from a directory.

Request Syntax

```
{
   "ResourceId": "string",
   "TagKeys": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

Identifier (ID) of the directory from which to remove the tag.

Type: String

Pattern: `^[d]-[0-9a-f]{10}$`

Required: Yes

TagKeys

The tag key (name) of the tag to be removed.

Type: Array of strings

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

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

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of RemoveTagsFromResource.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 58
X-Amz-Target: DirectoryService_20150416.RemoveTagsFromResource
X-Amz-Date: 20161214T234556Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=707f9d53696de7adc446b3bd54404571011febc29e9b76c6aed793767639bf47

 {
   "ResourceId":"d-926example",
   "TagKeys": ["environment"]
 }
```

Example Response

This example illustrates one usage of RemoveTagsFromResource.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 767374a0-c257-11e6-ad7a-a9557d30f017
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 23:45:58 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ResetUserPassword

Resets the password for any user in your AWS Managed Microsoft AD or Simple AD directory. Disabled users will become enabled and can be authenticated following the API call.

You can reset the password for any user in your directory with the following exceptions:

- For Simple AD, you cannot reset the password for any user that is a member of either the **Domain Admins** or **Enterprise Admins** group except for the administrator user.
- For AWS Managed Microsoft AD, you can only reset the password for a user that is in an OU based off of the NetBIOS name that you typed when you created your directory. For example, you cannot reset the password for a user in the **AWS Reserved** OU. For more information about the OU structure for an AWS Managed Microsoft AD directory, see What Gets Created in the *AWS Directory Service Administration Guide*.

Request Syntax

```
{
   "DirectoryId": "string",
   "NewPassword": "string",
   "UserName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier of the AWS Managed Microsoft AD or Simple AD directory in which the user resides.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

NewPassword

The new password that will be reset.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Required: Yes

UserName

The user name of the user whose password will be reset.

Type: String

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

Pattern: `^(?!.*\\|.*"|.*\/|.*\[|.*\]|.*:|.*;|.*\||.*=|.*,|.*\+|.*\*|.*\?|.*<|.*>|.*@).*$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidPasswordException

The new password provided by the user does not meet the password complexity requirements defined in your directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

UserDoesNotExistException

The user provided a username that does not exist in your directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

RestoreFromSnapshot

Restores a directory using an existing directory snapshot.

When you restore a directory from a snapshot, any changes made to the directory after the snapshot date are overwritten.

This action returns as soon as the restore operation is initiated. You can monitor the progress of the restore operation by calling the DescribeDirectories operation with the directory identifier. When the **DirectoryDescription.Stage** value changes to `Active`, the restore operation is complete.

Request Syntax

```
{
   "SnapshotId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SnapshotId

The identifier of the snapshot to restore from.

Type: String

Pattern: `^s-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of RestoreFromSnapshot.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 30
X-Amz-Target: DirectoryService_20150416.RestoreFromSnapshot
X-Amz-Date: 20161214T235310Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161214/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=5c6be5a543a9df855e15ed75c131318330c4acf9b791515e8b3524e2430c180f

 {
   "SnapshotId": "s-9267f6da4e"
 }
```

Example Response

This example illustrates one usage of RestoreFromSnapshot.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 78ebab96-c258-11e6-a4dc-e5519684970a
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Wed, 14 Dec 2016 23:53:12 GMT

{
```

```
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

ShareDirectory

Shares a specified directory (`DirectoryId`) in your AWS account (directory owner) with another AWS account (directory consumer). With this operation you can use your directory from any AWS account and from any Amazon VPC within an AWS Region.

When you share your AWS Managed Microsoft AD directory, AWS Directory Service creates a shared directory in the directory consumer account. This shared directory contains the metadata to provide access to the directory within the directory owner account. The shared directory is visible in all VPCs in the directory consumer account.

The `ShareMethod` parameter determines whether the specified directory can be shared between AWS accounts inside the same AWS organization (`ORGANIZATIONS`). It also determines whether you can share the directory with any other AWS account either inside or outside of the organization (`HANDSHAKE`).

The `ShareNotes` parameter is only used when `HANDSHAKE` is called, which sends a directory sharing request to the directory consumer.

Request Syntax

```
{
   "DirectoryId": "string",
   "ShareMethod": "string",
   "ShareNotes": "string",
   "ShareTarget": {
      "Id": "string",
      "Type": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

Identifier of the AWS Managed Microsoft AD directory that you want to share with other AWS accounts.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

ShareMethod

The method used when sharing a directory to determine whether the directory should be shared within your AWS organization (`ORGANIZATIONS`) or with any AWS account by sending a directory sharing request (`HANDSHAKE`).

Type: String

Valid Values: `ORGANIZATIONS | HANDSHAKE`

Required: Yes

ShareNotes

A directory share request that is sent by the directory owner to the directory consumer. The request includes a typed message to help the directory consumer administrator determine whether to approve or reject the share invitation.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

ShareTarget

Identifier for the directory consumer account with whom the directory is to be shared.

Type: ShareTarget object

Required: Yes

Response Syntax

```
{
   "SharedDirectoryId": "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.

SharedDirectoryId

Identifier of the directory that is stored in the directory consumer account that is shared from the specified directory (`DirectoryId`).

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryAlreadySharedException

The specified directory has already been shared with this AWS account.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidTargetException

The specified shared target is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

OrganizationsException

Exception encountered while trying to access your AWS organization.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

ShareLimitExceededException

The maximum number of AWS accounts that you can share with this directory has been reached.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

StartADAssessment

Initiates a directory assessment to validate your self-managed AD environment for hybrid domain join. The assessment checks compatibility and connectivity of the self-managed AD environment.

A directory assessment is automatically created when you create a hybrid directory. There are two types of assessments: `CUSTOMER` and `SYSTEM`. Your AWS account has a limit of 100 `CUSTOMER` directory assessments.

The assessment process typically takes 30 minutes or more to complete. The assessment process is asynchronous and you can monitor it with `DescribeADAssessment`.

The `InstanceIds` must have a one-to-one correspondence with `CustomerDnsIps`, meaning that if the IP address for instance i-10243410 is 10.24.34.100 and the IP address for instance i-10243420 is 10.24.34.200, then the input arrays must maintain the same order relationship, either [10.24.34.100, 10.24.34.200] paired with [i-10243410, i-10243420] or [10.24.34.200, 10.24.34.100] paired with [i-10243420, i-10243410].

Note: You must provide exactly one `DirectoryId` or `AssessmentConfiguration`.

Request Syntax

```
{
   "AssessmentConfiguration": {
      "CustomerDnsIps": [ "string" ],
      "DnsName": "string",
      "InstanceIds": [ "string" ],
      "SecurityGroupIds": [ "string" ],
      "VpcSettings": {
         "SubnetIds": [ "string" ],
         "VpcId": "string"
      }
   },
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssessmentConfiguration

Configuration parameters for the directory assessment, including DNS server information, domain name, Amazon VPC subnet, and AWS System Manager managed node details.

Type: AssessmentConfiguration object

Required: No

DirectoryId

The identifier of the directory for which to perform the assessment. This should be an existing directory. If the assessment is not for an existing directory, this parameter should be omitted.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Response Syntax

```
{
   "AssessmentId": "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.

AssessmentId

The unique identifier of the newly started directory assessment. Use this identifier to monitor assessment progress and retrieve results.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Errors

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

ADAssessmentLimitExceededException

A directory assessment is automatically created when you create a hybrid directory. There are two types of assessments: CUSTOMER and SYSTEM. Your AWS account has a limit of 100 CUSTOMER directory assessments.

If you attempt to create a hybrid directory; and you already have 100 CUSTOMER directory assessments;, you will encounter an error. Delete assessments to free up capacity before trying again.

You can request an increase to your CUSTOMER directory assessment quota by contacting customer support or delete existing CUSTOMER directory assessments; to free up capacity.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Pre-join Request

This example illustrates one usage of StartADAssessment.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 312
X-Amz-Target: DirectoryService_20150416.StartADAssessment
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855
// Request - prejoin
{
    "AssessmentConfiguration": {
        "CustomerDnsIps": ["10.24.34.100", "10.24.34.200"],
        "DnsName": "ad.example.com",
        "VpcSettings": {
            "VpcId": "vpc-04c978example126f",
            "SubnetIds": ["subnet-0994bexampled9ea7", "subnet-095e06examplee7e7"]
        },
        "InstanceIds": ["i-10243410", "i-10243420"],
        "SecurityGroupIds": ["sg-0fbb77examplef199"]
    }
}
```

Example Post-join Request

This example illustrates one usage of StartADAssessment.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
```

```
Accept-Encoding: identity
Content-Length: 312
X-Amz-Target: DirectoryService_20150416.StartADAssessment
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

// Request - postjoin
{
    "DirectoryId": "d-926example"
}
```

Example Response

This example illustrates one usage of StartADAssessment.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 45
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "AssessmentId": "da-1234567890example1"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

StartSchemaExtension

Applies a schema extension to a Microsoft AD directory.

Request Syntax

```
{
   "CreateSnapshotBeforeSchemaExtension": boolean,
   "Description": "string",
   "DirectoryId": "string",
   "LdifContent": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CreateSnapshotBeforeSchemaExtension

If true, creates a snapshot of the directory before applying the schema extension.

Type: Boolean

Required: Yes

Description

A description of the schema extension.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: Yes

DirectoryId

The identifier of the directory for which the schema extension will be applied to.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

LdifContent

The LDIF file represented as a string. To construct the LdifContent string, precede each line as it would be formatted in an ldif file with \n. See the example request below for more details. The file size can be no larger than 1MB.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 500000.

Required: Yes

Response Syntax

```
{
   "SchemaExtensionId": "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.

SchemaExtensionId

The identifier of the schema extension that will be applied.

Type: String

Pattern: `^e-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

SnapshotLimitExceededException

The maximum number of manual snapshots for the directory has been reached. You can use the GetSnapshotLimits operation to determine the snapshot limits for a directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of StartSchemaExtension.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 320
X-Amz-Target: DirectoryService_20150416.StartSchemaExtension
X-Amz-Date: 20161219T190703Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
```

```
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161219/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=5c1200f494c1771770d7aa964e45ee36d80e724e0d9a8e62ab9822574c8cc915

 {
   "CreateSnapshotBeforeSchemaExtension":true,
   "DirectoryId":"d-926example",
   "LdifContent":"dn: CN=User,CN=Schema,CN=Configuration,DC=sales,DC=example,DC=com
\nchangetype: modify\nadd: mayContain\nmayContain: drink\n-\n\nDN:\nchangetype: modify
\nreplace: schemaupdatenow\nschemaupdatenow: 1\n-",
   "Description":"Adds may contain attribute to user class. To construct the
 LdifContent string, precede each line as it would be formatted in an ldif file with
 \n. For example the LdifContent string above is formatted the following way in an Ldif
 file:

     dn: CN=User,CN=Schema,CN=Configuration,DC=sales,DC=example,DC=com
     changetype: modify
     add: mayContain
     mayContain: drink
     -

     dn:
     changetype: modify
     replace: schemaupdatenow
     schemaupdatenow: 1
     -"
 }
```

Example Response

This example illustrates one usage of StartSchemaExtension.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 54723d00-c61e-11e6-a96d-2b0686697d23
Content-Type: application/x-amz-json-1.1
Content-Length: 36
Date: Mon, 19 Dec 2016 19:07:04 GMT

{
  "SchemaExtensionId": "e-926731dc50"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UnshareDirectory

Stops the directory sharing between the directory owner and consumer accounts.

Request Syntax

```
{
   "DirectoryId": "string",
   "UnshareTarget": {
      "Id": "string",
      "Type": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the AWS Managed Microsoft AD directory that you want to stop sharing.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

UnshareTarget

Identifier for the directory consumer account with whom the directory has to be unshared.

Type: UnshareTarget object

Required: Yes

Response Syntax

```
{
   "SharedDirectoryId": "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.

SharedDirectoryId

Identifier of the directory stored in the directory consumer account that is to be unshared from the specified directory (`DirectoryId`).

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryNotSharedException

The specified directory has not been shared with this AWS account.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidTargetException

The specified shared target is not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateConditionalForwarder

Updates a conditional forwarder that has been set up for your AWS directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "DnsIpAddrs": [ "string" ],
   "DnsIpv6Addrs": [ "string" ],
   "RemoteDomainName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The directory ID of the AWS directory for which to update the conditional forwarder.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

DnsIpAddrs

The updated IP addresses of the remote DNS server associated with the conditional forwarder.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addrs

The updated IPv6 addresses of the remote DNS server associated with the conditional forwarder.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

RemoteDomainName

The fully qualified domain name (FQDN) of the remote domain with which you will set up a trust relationship.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of UpdateConditionalForwarder.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 107
X-Amz-Target: DirectoryService_20150416.UpdateConditionalForwarder
X-Amz-Date: 20161215T183823Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161215/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=84648cead858ef1efd7db75ce248aa3e22a78139b109eec6122dc3c495b71085
```

```
{
  "DirectoryId":"d-926example",
  "RemoteDomainName":"sales.example.com",
  "DnsIpAddrs": ["172.168.101.11"]
}
```

Example Response

This example illustrates one usage of UpdateConditionalForwarder.

```
HTTP/1.1 200 OK
x-amzn-RequestId: aa015a05-c2f5-11e6-b3d3-bf8f15b8b2ee
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Thu, 15 Dec 2016 18:38:27 GMT

 {

 }
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateDirectorySetup

Updates directory configuration for the specified update type.

Request Syntax

```
{
   "CreateSnapshotBeforeUpdate": boolean,
   "DirectoryId": "string",
   "DirectorySizeUpdateSettings": {
      "DirectorySize": "string"
   },
   "NetworkUpdateSettings": {
      "CustomerDnsIpsV6": [ "string" ],
      "NetworkType": "string"
   },
   "OSUpdateSettings": {
      "OSVersion": "string"
   },
   "UpdateType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CreateSnapshotBeforeUpdate

Specifies whether to create a directory snapshot before performing the update.

Type: Boolean

Required: No

DirectoryId

The identifier of the directory to update.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

DirectorySizeUpdateSettings

Directory size configuration to apply during the update operation.

Type: DirectorySizeUpdateSettings object

Required: No

NetworkUpdateSettings

Network configuration to apply during the directory update operation.

Type: NetworkUpdateSettings object

Required: No

OSUpdateSettings

Operating system configuration to apply during the directory update operation.

Type: OSUpdateSettings object

Required: No

UpdateType

The type of update to perform on the directory.

Type: String

Valid Values: `OS | NETWORK | SIZE`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryInDesiredStateException

The directory is already updated to desired update type settings.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

SnapshotLimitExceededException

The maximum number of manual snapshots for the directory has been reached. You can use the GetSnapshotLimits operation to determine the snapshot limits for a directory.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateHybridAD

Updates the configuration of an existing hybrid directory. You can recover hybrid directory administrator account or modify self-managed instance settings.

Updates are applied asynchronously. Use DescribeHybridADUpdate to monitor the progress of configuration changes.

The `InstanceIds` must have a one-to-one correspondence with `CustomerDnsIps`, meaning that if the IP address for instance i-10243410 is 10.24.34.100 and the IP address for instance i-10243420 is 10.24.34.200, then the input arrays must maintain the same order relationship, either [10.24.34.100, 10.24.34.200] paired with [i-10243410, i-10243420] or [10.24.34.200, 10.24.34.100] paired with [i-10243420, i-10243410].

> **Note**
>
> You must provide at least one update to UpdateHybridAD:HybridAdministratorAccountUpdate or UpdateHybridAD:SelfManagedInstancesSettings.

Request Syntax

```
{
   "DirectoryId": "string",
   "HybridAdministratorAccountUpdate": {
      "SecretArn": "string"
   },
   "SelfManagedInstancesSettings": {
      "CustomerDnsIps": [ "string" ],
      "InstanceIds": [ "string" ]
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the hybrid directory to update.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

HybridAdministratorAccountUpdate

We create a hybrid directory administrator account when we create a hybrid directory. Use `HybridAdministratorAccountUpdate` to recover the hybrid directory administrator account if you have deleted it.

To recover your hybrid directory administrator account, we need temporary access to a user in your self-managed AD with administrator permissions in the form of a secret from AWS Secrets Manager. We use these credentials once during recovery and don't store them.

If your hybrid directory administrator account exists, then you don't need to use `HybridAdministratorAccountUpdate`, even if you have updated your self-managed AD administrator user.

Type: HybridAdministratorAccountUpdate object

Required: No

SelfManagedInstancesSettings

Updates to the self-managed AD configuration, including DNS server IP addresses and AWS System Manager managed node identifiers.

Type: HybridCustomerInstancesSettings object

Required: No

Response Syntax

```
{
   "AssessmentId": "string",
   "DirectoryId": "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.

AssessmentId

The identifier of the assessment performed to validate the update configuration. This assessment ensures the updated settings are compatible with your environment.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

DirectoryId

The identifier of the updated hybrid directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ADAssessmentLimitExceededException

A directory assessment is automatically created when you create a hybrid directory. There are two types of assessments: `CUSTOMER` and `SYSTEM`. Your AWS account has a limit of 100 `CUSTOMER` directory assessments.

If you attempt to create a hybrid directory; and you already have 100 `CUSTOMER` directory assessments;, you will encounter an error. Delete assessments to free up capacity before trying again.

You can request an increase to your `CUSTOMER` directory assessment quota by contacting customer support or delete existing CUSTOMER directory assessments; to free up capacity.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of UpdateHybridAD.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 245
X-Amz-Target: DirectoryService_20150416.UpdateHybridAD
X-Amz-Date: 20231212T212029Z
User-Agent: aws-cli/2.0.0 Python/3.8.0 Linux/5.4.0 botocore/2.0.0
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20231212/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855

{
    "DirectoryId": d-926example,
    "HybridAdministratorAccountUpdate": {
        "SecretArn": "arn:aws:secretsmanager:eu-west-1:111122223333:secret:CredExample-
DZESji"
    },
    "SelfManagedInstancesSettings": {
        "CustomerDnsIps": ["10.24.34.100", "10.24.34.200"],
        "InstanceIds": ["i-10243410", "i-10243420"],
    }
}
```

Example Response

This example illustrates one usage of UpdateHybridAD.

```
HTTP/1.1 200 OK
x-amzn-RequestId: cfc1cbc8-c0b0-11e6-aa44-41d91ee57463
Content-Type: application/x-amz-json-1.1
Content-Length: 75
Date: Mon, 12 Dec 2023 21:20:31 GMT

{
    "DirectoryId": "d-926example",
    "AssessmentId": "da-1234567890example1"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateNumberOfDomainControllers

Adds or removes domain controllers to or from the directory. Based on the difference between current value and new value (provided through this API call), domain controllers will be added or removed. It may take up to 45 minutes for any new domain controllers to become fully active once the requested number of domain controllers is updated. During this time, you cannot make another update request.

Request Syntax

```
{
   "DesiredNumber": number,
   "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DesiredNumber

The number of domain controllers desired in the directory.

Type: Integer

Valid Range: Minimum value of 2.

Required: Yes

DirectoryId

Identifier of the directory to which the domain controllers will be added or removed.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DomainControllerLimitExceededException

The maximum allowed number of domain controllers per directory was exceeded. The default limit per directory is 20 domain controllers.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateRadius

Updates the Remote Authentication Dial In User Service (RADIUS) server information for an AD Connector or Microsoft AD directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "RadiusSettings": {
      "AuthenticationProtocol": "string",
      "DisplayLabel": "string",
      "RadiusPort": number,
      "RadiusRetries": number,
      "RadiusServers": [ "string" ],
      "RadiusServersIpv6": [ "string" ],
      "RadiusTimeout": number,
      "SharedSecret": "string",
      "UseSameUsername": boolean
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to update the RADIUS server information.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

RadiusSettings

A RadiusSettings object that contains information about the RADIUS server.

Type: RadiusSettings object

Required: Yes

Response Elements

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

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of UpdateRadius.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 262
X-Amz-Target: DirectoryService_20150416.UpdateRadius
X-Amz-Date: 20161215T184937Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161215/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=6cc8097b61ad0ee23e166193d317a066feeea582d252b57923a0781dc011a686

 {
   "DirectoryId":"d-926example",
   "RadiusSettings":{
      "DisplayLabel":"MyRadius",
      "UseSameUsername":true,
      "RadiusTimeout":1,
      "AuthenticationProtocol":"PAP",
```

```
      "RadiusPort":1027,
      "RadiusRetries":1,
      "SharedSecret":"12345678",
      "RadiusServers":[
         "172.168.101.113"
      ]
   }
}
```

Example Response

This example illustrates one usage of UpdateRadius.

```
HTTP/1.1 200 OK
x-amzn-RequestId: fcd40ac9-c247-11e6-a7ca-f9a52a6a0390
Content-Type: application/x-amz-json-1.1
Content-Length: 2
Date: Thu, 15 Dec 2016 18:49:39 GMT

{

}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateSettings

Updates the configurable settings for the specified directory.

Request Syntax

```
{
   "DirectoryId": "string",
   "Settings": [
      {
         "Name": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory for which to update settings.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: Yes

Settings

The list of Setting objects.

Type: Array of Setting objects

Required: Yes

Response Syntax

```
{
   "DirectoryId": "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.

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryDoesNotExistException

The specified directory does not exist in the system.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

DirectoryUnavailableException

The specified directory is unavailable.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

IncompatibleSettingsException

The specified directory setting is not compatible with other settings.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

UnsupportedSettingsException

The specified directory setting is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

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 V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

UpdateTrust

Updates the trust that has been set up between your AWS Managed Microsoft AD directory and an self-managed Active Directory.

Request Syntax

```
{
   "SelectiveAuth": "string",
   "TrustId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SelectiveAuth

Updates selective authentication for the trust.

Type: String

Valid Values: `Enabled | Disabled`

Required: No

TrustId

Identifier of the trust relationship.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "RequestId": "string",
```

```
    "TrustId": "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.

RequestId

The AWS request identifier.

Type: String

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})$`

TrustId

Identifier of the trust relationship.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

See Also

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

- AWS Command Line Interface V2

- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

VerifyTrust

AWS Directory Service for Microsoft Active Directory allows you to configure and verify trust relationships.

This action verifies a trust relationship between your AWS Managed Microsoft AD directory and an external domain.

Request Syntax

```
{
   "TrustId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

TrustId

The unique Trust ID of the trust relationship to verify.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Required: Yes

Response Syntax

```
{
   "TrustId": "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.

TrustId

The unique Trust ID of the trust relationship that was verified.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Errors

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

ClientException

A client exception has occurred.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

EntityDoesNotExistException

The specified entity could not be found.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

InvalidParameterException

One or more parameters are not valid.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

ServiceException

An exception has occurred in AWS Directory Service.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 500

UnsupportedOperationException

The operation is not supported.

Message

The descriptive message for the exception.

RequestId

The AWS request identifier.

HTTP Status Code: 400

Examples

The following examples are formatted for legibility.

Example Request

This example illustrates one usage of VerifyTrust.

```
POST / HTTP/1.1
Host: ds.us-west-2.amazonaws.com
Accept-Encoding: identity
Content-Length: 27
```

```
X-Amz-Target: DirectoryService_20150416.VerifyTrust
X-Amz-Date: 20161215T191010Z
User-Agent: aws-cli/1.11.24 Python/2.7.9 Windows/7 botocore/1.4.81
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
 Credential=AKIAI7E3BYXS3example/20161215/us-west-2/ds/aws4_request,
 SignedHeaders=content-type;host;x-amz-date;x-amz-target,
 Signature=249c3fb0ac94d57cc9abb43f6422fe237fce723ddd9462a4666712e46e3b5371

 {
   "TrustId": "t-9267353df0"
 }
```

Example Response

This example illustrates one usage of VerifyTrust.

```
HTTP/1.1 200 OK
x-amzn-RequestId: 3343bc79-c18f-11e6-ba7f-e33ae22bc363
Content-Type: application/x-amz-json-1.1
Content-Length: 26
Date: Thu, 15 Dec 2016 19:10:12 GMT

{
   "TrustId": "t-9267353df0"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- 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 (Boto3)
- AWS SDK for Ruby V3

Data Types

The AWS Directory Service 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:

- Assessment
- AssessmentConfiguration
- AssessmentReport
- AssessmentSummary
- AssessmentValidation
- Attribute
- Certificate
- CertificateInfo
- ClientAuthenticationSettingInfo
- ClientCertAuthSettings
- Computer
- ConditionalForwarder
- DirectoryConnectSettings
- DirectoryConnectSettingsDescription
- DirectoryDescription
- DirectoryLimits
- DirectorySizeUpdateSettings
- DirectoryVpcSettings
- DirectoryVpcSettingsDescription
- DomainController

- EventTopic
- HybridAdministratorAccountUpdate
- HybridCustomerInstancesSettings
- HybridSettingsDescription
- HybridUpdateActivities
- HybridUpdateInfoEntry
- HybridUpdateValue
- IpRoute
- IpRouteInfo
- LDAPSSettingInfo
- LogSubscription
- NetworkUpdateSettings
- OSUpdateSettings
- OwnerDirectoryDescription
- RadiusSettings
- RegionDescription
- RegionsInfo
- SchemaExtensionInfo
- Setting
- SettingEntry
- SharedDirectory
- ShareTarget
- Snapshot
- SnapshotLimits
- Tag
- Trust
- UnshareTarget
- UpdateInfoEntry
- UpdateValue

Assessment

Contains detailed information about a directory assessment, including configuration parameters, status, and validation results.

Contents

AssessmentId

The unique identifier of the directory assessment.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Required: No

CustomerDnsIps

The IP addresses of the DNS servers or domain controllers in your self-managed AD environment.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DirectoryId

The identifier of the directory associated with this assessment.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

DnsName

The fully qualified domain name (FQDN) of the Active Directory domain being assessed.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: No

LastUpdateDateTime

The date and time when the assessment status was last updated.

Type: Timestamp

Required: No

ReportType

The type of assessment report generated. Valid values are `CUSTOMER` and `SYSTEM`.

Type: String

Required: No

SecurityGroupIds

The security groups identifiers attached to the network interfaces.

Type: Array of strings

Array Members: Fixed number of 1 item.

Pattern: `^(sg-[0-9a-f]{8}|sg-[0-9a-f]{17})$`

Required: No

SelfManagedInstanceIds

The identifiers of the self-managed AD instances used to perform the assessment.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(i-[0-9a-f]{8}|i-[0-9a-f]{17}|mi-[0-9a-f]{8}|mi-[0-9a-f]{17})$`

Required: No

StartTime

The date and time when the assessment was initiated.

Type: Timestamp

Required: No

Status

The current status of the assessment. Valid values include `SUCCESS`, `FAILED`, `PENDING`, and `IN_PROGRESS`.

Type: String

Required: No

StatusCode

A detailed status code providing additional information about the assessment state.

Type: String

Required: No

StatusReason

A human-readable description of the current assessment status, including any error details or progress information.

Type: String

Required: No

SubnetIds

A list of subnet identifiers in the Amazon VPC in which the hybrid directory is created.

Type: Array of strings

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: No

Version

The version of the assessment framework used to evaluate your self-managed AD environment.

Type: String

Required: No

VpcId

Contains Amazon VPC information for the `StartADAssessment` operation.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

Required: No

See Also

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

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

AssessmentConfiguration

Contains configuration parameters required to perform a directory assessment.

Contents

CustomerDnsIps

A list of IP addresses for the DNS servers or domain controllers in your self-managed AD that are tested during the assessment.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: Yes

DnsName

The fully qualified domain name (FQDN) of the self-managed AD domain to assess.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: Yes

InstanceIds

The identifiers of the self-managed instances with SSM that are used to perform connectivity and validation tests.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(i-[0-9a-f]{8}|i-[0-9a-f]{17}|mi-[0-9a-f]{8}|mi-[0-9a-f]{17})$`

Required: Yes

VpcSettings

Contains VPC information for the CreateDirectory, CreateMicrosoftAD, or CreateHybridAD operation.

Type: DirectoryVpcSettings object

Required: Yes

SecurityGroupIds

By default, the service attaches a security group to allow network access to the self-managed nodes in your Amazon VPC. You can optionally supply your own security group that allows network traffic to and from your self-managed domain controllers outside of your Amazon VPC.

Type: Array of strings

Array Members: Fixed number of 1 item.

Pattern: `^(sg-[0-9a-f]{8}|sg-[0-9a-f]{17})$`

Required: No

See Also

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

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

AssessmentReport

Contains the results of validation tests performed against a specific domain controller during a directory assessment.

Contents

DomainControllerIp

The IP address of the domain controller that was tested during the assessment.

Type: String

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

Validations

A list of validation results for different test categories performed against this domain controller.

Type: Array of AssessmentValidation objects

Required: No

See Also

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

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

AssessmentSummary

Contains summary information about a directory assessment, providing a high-level overview without detailed validation results.

Contents

AssessmentId

The unique identifier of the directory assessment.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Required: No

CustomerDnsIps

The IP addresses of the DNS servers or domain controllers in your self-managed AD environment.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DirectoryId

The identifier of the directory associated with this assessment.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

DnsName

The fully qualified domain name (FQDN) of the Active Directory domain being assessed.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: No

LastUpdateDateTime

The date and time when the assessment status was last updated.

Type: Timestamp

Required: No

ReportType

The type of assessment report generated. Valid values include `CUSTOMER` and `SYSTEM`.

Type: String

Required: No

StartTime

The date and time when the assessment was initiated.

Type: Timestamp

Required: No

Status

The current status of the assessment. Valid values include `SUCCESS`, `FAILED`, `PENDING`, and `IN_PROGRESS`.

Type: String

Required: No

See Also

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

- AWS SDK for C++

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

AssessmentValidation

Contains information about a specific validation test performed during a directory assessment.

Contents

Category

The category of the validation test.

Type: String

Required: No

LastUpdateDateTime

The date and time when the validation test was completed or last updated.

Type: Timestamp

Required: No

Name

The name of the specific validation test performed within the category.

Type: String

Required: No

StartTime

The date and time when the validation test was started.

Type: Timestamp

Required: No

Status

The result status of the validation test. Valid values include `SUCCESS`, `FAILED`, `PENDING`, and `IN_PROGRESS`.

Type: String

Required: No

StatusCode

A detailed status code providing additional information about the validation result.

Type: String

Required: No

StatusReason

A human-readable description of the validation result, including any error details or recommendations.

Type: String

Required: No

See Also

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

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

Attribute

Represents a named directory attribute.

Contents

Name

The name of the attribute.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Value

The value of the attribute.

Type: String

Required: No

See Also

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

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

Certificate

Information about the certificate.

Contents

CertificateId

The identifier of the certificate.

Type: String

Pattern: `^c-[0-9a-f]{10}$`

Required: No

ClientCertAuthSettings

A `ClientCertAuthSettings` object that contains client certificate authentication settings.

Type: ClientCertAuthSettings object

Required: No

CommonName

The common name for the certificate.

Type: String

Required: No

ExpiryDateTime

The date and time when the certificate will expire.

Type: Timestamp

Required: No

RegisteredDateTime

The date and time that the certificate was registered.

Type: Timestamp

Required: No

State

The state of the certificate.

Type: String

Valid Values: `Registering | Registered | RegisterFailed | Deregistering | Deregistered | DeregisterFailed`

Required: No

StateReason

Describes a state change for the certificate.

Type: String

Required: No

Type

The function that the registered certificate performs. Valid values include `ClientLDAPS` or `ClientCertAuth`. The default value is `ClientLDAPS`.

Type: String

Valid Values: `ClientCertAuth | ClientLDAPS`

Required: No

See Also

For 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

CertificateInfo

Contains general information about a certificate.

Contents

CertificateId

The identifier of the certificate.

Type: String

Pattern: `^c-[0-9a-f]{10}$`

Required: No

CommonName

The common name for the certificate.

Type: String

Required: No

ExpiryDateTime

The date and time when the certificate will expire.

Type: Timestamp

Required: No

State

The state of the certificate.

Type: String

Valid Values: `Registering | Registered | RegisterFailed | Deregistering | Deregistered | DeregisterFailed`

Required: No

Type

The function that the registered certificate performs. Valid values include `ClientLDAPS` or `ClientCertAuth`. The default value is `ClientLDAPS`.

Type: String

Valid Values: `ClientCertAuth | ClientLDAPS`

Required: No

See Also

For 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

ClientAuthenticationSettingInfo

Contains information about a client authentication method for a directory.

Contents

LastUpdatedDateTime

The date and time when the status of the client authentication type was last updated.

Type: Timestamp

Required: No

Status

Whether the client authentication type is enabled or disabled for the specified directory.

Type: String

Valid Values: `Enabled | Disabled`

Required: No

Type

The type of client authentication for the specified directory. If no type is specified, a list of all client authentication types that are supported for the directory is retrieved.

Type: String

Valid Values: `SmartCard | SmartCardOrPassword`

Required: No

See Also

For 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

ClientCertAuthSettings

Contains information about the client certificate authentication settings for the `RegisterCertificate` and `DescribeCertificate` operations.

Contents

OCSPUrl

Specifies the URL of the default OCSP server used to check for revocation status. A secondary value to any OCSP address found in the AIA extension of the user certificate.

Type: String

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

Pattern: `^(https?|ftp|file|ldaps?)://[-a-zA-Z0-9+&@#/%?=~_|!:,.;()]*[-a-zA-Z0-9+&@#/%=~_|()]`

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

Computer

Contains information about a computer account in a directory.

Contents

ComputerAttributes

An array of Attribute objects containing the LDAP attributes that belong to the computer account.

Type: Array of Attribute objects

Required: No

ComputerId

The identifier of the computer.

Type: String

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

Pattern: `[&\w+-.@]+`

Required: No

ComputerName

The computer name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 15.

Required: No

See Also

For 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

ConditionalForwarder

Points to a remote domain with which you are setting up a trust relationship. Conditional forwarders are required in order to set up a trust relationship with another domain.

Contents

DnsIpAddrs

The IP addresses of the remote DNS server associated with RemoteDomainName. This is the IP address of the DNS server that your conditional forwarder points to.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addrs

The IPv6 addresses of the remote DNS server associated with RemoteDomainName. This is the IPv6 address of the DNS server that your conditional forwarder points to.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

RemoteDomainName

The fully qualified domain name (FQDN) of the remote domains pointed to by the conditional forwarder.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: No

ReplicationScope

The replication scope of the conditional forwarder. The only allowed value is `Domain`, which will replicate the conditional forwarder to all of the domain controllers for your AWS directory.

Type: String

Valid Values: `Domain`

Required: No

See Also

For 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

DirectoryConnectSettings

Contains connection settings for creating an AD Connector with the ConnectDirectory action.

Contents

CustomerUserName

The user name of an account in your self-managed directory that is used to connect to the directory. This account must have the following permissions:

- Read users and groups
- Create computer objects
- Join computers to the domain

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[a-zA-Z0-9._-]+`

Required: Yes

SubnetIds

A list of subnet identifiers in the VPC in which the AD Connector is created.

Type: Array of strings

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: Yes

VpcId

The identifier of the VPC in which the AD Connector is created.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

Required: Yes

CustomerDnsIps

The IP addresses of DNS servers or domain controllers in your self-managed directory.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

CustomerDnsIpsV6

The IPv6 addresses of DNS servers or domain controllers in your self-managed directory.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[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

DirectoryConnectSettingsDescription

Contains information about an AD Connector directory.

Contents

AvailabilityZones

The Availability Zones that the directory is in.

Type: Array of strings

Required: No

ConnectIps

The IP addresses of the AD Connector servers.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

ConnectIpsV6

The IPv6 addresses of the AD Connector servers.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

CustomerUserName

The user name of the service account in your self-managed directory.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[a-zA-Z0-9._-]+`

Required: No

SecurityGroupId

The security group identifier for the AD Connector directory.

Type: String

Pattern: `^(sg-[0-9a-f]{8}|sg-[0-9a-f]{17})$`

Required: No

SubnetIds

A list of subnet identifiers in the VPC that the AD Connector is in.

Type: Array of strings

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: No

VpcId

The identifier of the VPC that the AD Connector is in.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

Required: No

See Also

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

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

DirectoryDescription

Contains information about an AWS Directory Service directory.

Contents

AccessUrl

The access URL for the directory, such as `http://<alias>.awsapps.com`. If no alias exists, `<alias>` is the directory identifier, such as `d-XXXXXXXXXX`.

Type: String

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

Required: No

Alias

The alias for the directory. If no alias exists, the alias is the directory identifier, such as `d-XXXXXXXXXX`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 62.

Pattern: `^(?!D-|d-)([\da-zA-Z]+)([-]*[\da-zA-Z])*`

Required: No

ConnectSettings

DirectoryConnectSettingsDescription object that contains additional information about an AD Connector directory. Present only for AD Connector directories.

Type: DirectoryConnectSettingsDescription object

Required: No

Description

The description for the directory.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

DesiredNumberOfDomainControllers

The desired number of domain controllers in the directory if the directory is Microsoft AD.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

DnsIpAddrs

The IP addresses of the DNS servers for the directory. For a Simple AD or Microsoft AD directory, these are the IP addresses of the Simple AD or Microsoft AD directory servers. For an AD Connector directory, these are the IP addresses of self-managed directory to which the AD Connector is connected.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addrs

The IPv6 addresses of the DNS servers for the directory. For a Simple AD or Microsoft AD directory, these are the IPv6 addresses of the Simple AD or Microsoft AD directory servers. For an AD Connector directory, these are the IPv6 addresses of the DNS servers or domain controllers in your self-managed directory to which the AD Connector is connected.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

Edition

The edition associated with this directory.

Type: String

Valid Values: `Enterprise | Standard | Hybrid`

Required: No

HybridSettings

Contains information about the hybrid directory configuration for the directory, including AWS System Manager managed node identifiers and DNS IPs.

Type: HybridSettingsDescription object

Required: No

LaunchTime

The date and time when the directory was created.

Type: Timestamp

Required: No

Name

The fully qualified name of the directory.

Type: String

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+$`

Required: No

NetworkType

The network type of the directory.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

OsVersion

The operating system (OS) version of the directory.

Type: String

Valid Values: `SERVER_2012 | SERVER_2019`

Required: No

OwnerDirectoryDescription

Describes the AWS Managed Microsoft AD directory in the directory owner account.

Type: OwnerDirectoryDescription object

Required: No

RadiusSettings

Information about the RadiusSettings object configured for this directory.

Type: RadiusSettings object

Required: No

RadiusStatus

The status of the RADIUS MFA server connection.

Type: String

Valid Values: `Creating | Completed | Failed`

Required: No

RegionsInfo

Lists the Regions where the directory has replicated.

Type: RegionsInfo object

Required: No

ShareMethod

The method used when sharing a directory to determine whether the directory should be shared within your AWS organization (`ORGANIZATIONS`) or with any AWS account by sending a shared directory request (`HANDSHAKE`).

Type: String

Valid Values: `ORGANIZATIONS | HANDSHAKE`

Required: No

ShareNotes

A directory share request that is sent by the directory owner to the directory consumer. The request includes a typed message to help the directory consumer administrator determine whether to approve or reject the share invitation.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

ShareStatus

Current directory status of the shared AWS Managed Microsoft AD directory.

Type: String

Valid Values: `Shared | PendingAcceptance | Rejected | Rejecting | RejectFailed | Sharing | ShareFailed | Deleted | Deleting`

Required: No

ShortName

The short name of the directory.

Type: String

Pattern: `^[^\\/:*?"<>|.]+[^\\/:*?"<>|]*$`

Required: No

Size

The directory size.

Type: String

Valid Values: `Small | Large`

Required: No

SsoEnabled

Indicates whether single sign-on is enabled for the directory. For more information, see EnableSso and DisableSso.

Type: Boolean

Required: No

Stage

The current stage of the directory.

Type: String

Valid Values: `Requested | Creating | Created | Active | Inoperable | Impaired | Restoring | RestoreFailed | Deleting | Deleted | Failed | Updating`

Required: No

StageLastUpdatedDateTime

The date and time when the stage was last updated.

Type: Timestamp

Required: No

StageReason

Additional information about the directory stage.

Type: String

Required: No

Type

The directory type.

Type: String

Valid Values: `SimpleAD | ADConnector | MicrosoftAD | SharedMicrosoftAD`

Required: No

VpcSettings

A DirectoryVpcSettingsDescription object that contains additional information about a directory. Present only for Simple AD and AWS Managed Microsoft AD directories.

Type: DirectoryVpcSettingsDescription 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

DirectoryLimits

Contains directory limit information for a Region.

Contents

CloudOnlyDirectoriesCurrentCount

The current number of cloud directories in the Region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

CloudOnlyDirectoriesLimit

The maximum number of cloud directories allowed in the Region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

CloudOnlyDirectoriesLimitReached

Indicates if the cloud directory limit has been reached.

Type: Boolean

Required: No

CloudOnlyMicrosoftADCurrentCount

The current number of AWS Managed Microsoft AD directories in the region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

CloudOnlyMicrosoftADLimit

The maximum number of AWS Managed Microsoft AD directories allowed in the region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

CloudOnlyMicrosoftADLimitReached

Indicates if the AWS Managed Microsoft AD directory limit has been reached.

Type: Boolean

Required: No

ConnectedDirectoriesCurrentCount

The current number of connected directories in the Region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

ConnectedDirectoriesLimit

The maximum number of connected directories allowed in the Region.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

ConnectedDirectoriesLimitReached

Indicates if the connected directory limit has been reached.

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

DirectorySizeUpdateSettings

Contains the directory size configuration for update operations.

Contents

DirectorySize

The target directory size for the update operation.

Type: String

Valid Values: `Small | Large`

Required: No

See Also

For 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

DirectoryVpcSettings

Contains VPC information for the CreateDirectory, CreateMicrosoftAD, or CreateHybridAD operation.

Contents

SubnetIds

The identifiers of the subnets for the directory servers. The two subnets must be in different Availability Zones. AWS Directory Service creates a directory server and a DNS server in each of these subnets.

Type: Array of strings

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: Yes

VpcId

The identifier of the VPC in which to create the directory.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

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

DirectoryVpcSettingsDescription

Contains information about the directory.

Contents

AvailabilityZones

The list of Availability Zones that the directory is in.

Type: Array of strings

Required: No

SecurityGroupId

The domain controller security group identifier for the directory.

Type: String

Pattern: `^(sg-[0-9a-f]{8}|sg-[0-9a-f]{17})$`

Required: No

SubnetIds

The identifiers of the subnets for the directory servers.

Type: Array of strings

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: No

VpcId

The identifier of the VPC that the directory is in.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

Required: No

See Also

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

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

DomainController

Contains information about the domain controllers for a specified directory.

Contents

AvailabilityZone

The Availability Zone where the domain controller is located.

Type: String

Required: No

DirectoryId

Identifier of the directory where the domain controller resides.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

DnsIpAddr

The IP address of the domain controller.

Type: String

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addr

The IPv6 address of the domain controller.

Type: String

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]`

```
{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-
F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-
F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4})
{0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|
1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|
([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}
(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$
```

Required: No

DomainControllerId

Identifies a specific domain controller in the directory.

Type: String

Pattern: `^dc-[0-9a-f]{10}$`

Required: No

LaunchTime

Specifies when the domain controller was created.

Type: Timestamp

Required: No

Status

The status of the domain controller.

Type: String

Valid Values: `Creating | Active | Impaired | Restoring | Deleting | Deleted | Failed | Updating`

Required: No

StatusLastUpdatedDateTime

The date and time that the status was last updated.

Type: Timestamp

Required: No

StatusReason

A description of the domain controller state.

Type: String

Required: No

SubnetId

Identifier of the subnet in the VPC that contains the domain controller.

Type: String

Pattern: `^(subnet-[0-9a-f]{8}|subnet-[0-9a-f]{17})$`

Required: No

VpcId

The identifier of the VPC that contains the domain controller.

Type: String

Pattern: `^(vpc-[0-9a-f]{8}|vpc-[0-9a-f]{17})$`

Required: No

See Also

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

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

EventTopic

Information about Amazon SNS topic and AWS Directory Service directory associations.

Contents

CreatedDateTime

The date and time of when you associated your directory with the Amazon SNS topic.

Type: Timestamp

Required: No

DirectoryId

The Directory ID of an AWS Directory Service directory that will publish status messages to an Amazon SNS topic.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Status

The topic registration status.

Type: String

Valid Values: `Registered | Topic not found | Failed | Deleted`

Required: No

TopicArn

The Amazon SNS topic ARN (Amazon Resource Name).

Type: String

Required: No

TopicName

The name of an Amazon SNS topic the receives status messages from the directory.

Type: String

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

Pattern: `[a-zA-Z0-9_-]+`

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

HybridAdministratorAccountUpdate

Use to recover to the hybrid directory administrator account credentials.

Contents

SecretArn

The Amazon Resource Name (ARN) of the AWS Secrets Manager secret that contains the credentials for the AD administrator user, and enables hybrid domain controllers to join the managed AD domain. For example:

`{"customerAdAdminDomainUsername":"carlos_salazar","customerAdAdminDomainPasswo`

Type: String

Pattern: `^arn:aws:secretsmanager:[a-z0-9-]+:\d{12}:secret:[a-zA-Z0-9/_+=.@-]+-[a-zA-Z0-9]{6}$`

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

HybridCustomerInstancesSettings

Contains configuration settings for self-managed instances with SSM used in hybrid directory operations.

Contents

CustomerDnsIps

The IP addresses of the DNS servers or domain controllers in your self-managed AD environment.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: Yes

InstanceIds

The identifiers of the self-managed instances with SSM used in hybrid directory.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(i-[0-9a-f]{8}|i-[0-9a-f]{17}|mi-[0-9a-f]{8}|mi-[0-9a-f]{17})$`

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

HybridSettingsDescription

Describes the current hybrid directory configuration settings for a directory.

Contents

SelfManagedDnsIpAddrs

The IP addresses of the DNS servers in your self-managed AD environment.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

SelfManagedInstanceIds

The identifiers of the self-managed instances with SSM used for hybrid directory operations.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(i-[0-9a-f]{8}|i-[0-9a-f]{17}|mi-[0-9a-f]{8}|mi-[0-9a-f]{17})$`

Required: No

See Also

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

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

HybridUpdateActivities

Contains information about update activities for different components of a hybrid directory.

Contents

HybridAdministratorAccount

A list of update activities related to hybrid directory administrator account changes.

Type: Array of HybridUpdateInfoEntry objects

Required: No

SelfManagedInstances

A list of update activities related to the self-managed instances with SSM in the self-managed instances with SSM hybrid directory configuration.

Type: Array of HybridUpdateInfoEntry objects

Required: No

See Also

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

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

HybridUpdateInfoEntry

Contains detailed information about a specific update activity for a hybrid directory component.

Contents

AssessmentId

The identifier of the assessment performed to validate this update configuration.

Type: String

Pattern: `^da-[0-9a-f]{18}$`

Required: No

InitiatedBy

Specifies if the update was initiated by the customer or AWS.

Type: String

Required: No

LastUpdatedDateTime

The date and time when the update activity status was last updated.

Type: Timestamp

Required: No

NewValue

The new configuration values being applied in this update.

Type: HybridUpdateValue object

Required: No

PreviousValue

The previous configuration values before this update was applied.

Type: HybridUpdateValue object

Required: No

StartTime

The date and time when the update activity was initiated.

Type: Timestamp

Required: No

Status

The current status of the update activity. Valid values include `UPDATED`, `UPDATING`, and `UPDATE_FAILED`.

Type: String

Valid Values: `Updated | Updating | UpdateFailed`

Required: No

StatusReason

A human-readable description of the update status, including any error details or progress information.

Type: String

Required: No

See Also

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

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

HybridUpdateValue

Contains the configuration values for a hybrid directory update, including AWS System Manager managed node and DNS information.

Contents

DnsIps

The IP addresses of the DNS servers or domain controllers in the hybrid directory configuration.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

InstanceIds

The identifiers of the self-managed instances with SSM in the hybrid directory configuration.

Type: Array of strings

Array Members: Fixed number of 2 items.

Pattern: `^(i-[0-9a-f]{8}|i-[0-9a-f]{17}|mi-[0-9a-f]{8}|mi-[0-9a-f]{17})$`

Required: No

See Also

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

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

IpRoute

Contains the IP address block. This is often the address block of the DNS server used for your self-managed domain.

Contents

CidrIp

IP address block in CIDR format, such as 10.0.0.0/24. This is often the address block of the DNS server used for your self-managed domain. For a single IP address, use a CIDR address block with /32. For example, 10.0.0.0/32.

Type: String

Pattern: `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])(\/([1-9]|[1-2][0-9]|3[0-2]))$`

Required: No

CidrIpv6

IPv6 address block in CIDR format, such as 2001:db8::/32. This is often the address block of the DNS server used for your self-managed domain. For a single IPv6 address, use a CIDR address block with /128. For example, 2001:db8::1/128.

Type: String

Pattern: `^((([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,7}:)|(([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2})|(([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3})|(([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4})|(([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5})|([0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6}))|(:((:[0-9a-fA-F]{1,4}){1,7}|:)))\/(12[0-8]|1[01][0-9]|[1-9]?[0-9])$`

Required: No

Description

Description of the address block.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

See Also

For 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

IpRouteInfo

Information about one or more IP address blocks.

Contents

AddedDateTime

The date and time the address block was added to the directory.

Type: Timestamp

Required: No

CidrIp

IP address block in the IpRoute.

Type: String

Pattern: `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])(\/([1-9]|[1-2][0-9]|3[0-2]))$`

Required: No

CidrIpv6

IPv6 address block in the IpRoute.

Type: String

Pattern: `^((([0-9a-fA-F]{1,4}:){7}[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,7}:)|(([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4})|(([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2})|(([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3})|(([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4})|(([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5})|([0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6}))|(:((:[0-9a-fA-F]{1,4}){1,7}|:)))\/(12[0-8]|1[01][0-9]|[1-9]?[0-9])$`

Required: No

Description

Description of the IpRouteInfo.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

DirectoryId

Identifier (ID) of the directory associated with the IP addresses.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

IpRouteStatusMsg

The status of the IP address block.

Type: String

Valid Values: `Adding | Added | Removing | Removed | AddFailed | RemoveFailed`

Required: No

IpRouteStatusReason

The reason for the IpRouteStatusMsg.

Type: String

Required: No

See Also

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

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

LDAPSSettingInfo

Contains general information about the LDAPS settings.

Contents

LastUpdatedDateTime

The date and time when the LDAPS settings were last updated.

Type: Timestamp

Required: No

LDAPSStatus

The state of the LDAPS settings.

Type: String

Valid Values: `Enabling | Enabled | EnableFailed | Disabled`

Required: No

LDAPSStatusReason

Describes a state change for LDAPS.

Type: String

Required: No

See Also

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

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

LogSubscription

Represents a log subscription, which tracks real-time data from a chosen log group to a specified destination.

Contents

DirectoryId

Identifier (ID) of the directory that you want to associate with the log subscription.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

LogGroupName

The name of the log group.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: `[-._/#A-Za-z0-9]+`

Required: No

SubscriptionCreatedDateTime

The date and time that the log subscription was created.

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

NetworkUpdateSettings

Contains the network configuration for directory update operations.

Contents

CustomerDnsIpsV6

IPv6 addresses of DNS servers or domain controllers in the self-managed directory. Required only when updating an AD Connector directory.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4}){0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$`

Required: No

NetworkType

The target network type for the directory update.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

See Also

For 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

OSUpdateSettings

OS version that the directory needs to be updated to.

Contents

OSVersion

OS version that the directory needs to be updated to.

Type: String

Valid Values: `SERVER_2012 | SERVER_2019`

Required: No

See Also

For 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

OwnerDirectoryDescription

Contains the directory owner account details shared with the directory consumer account.

Contents

AccountId

Identifier of the directory owner account.

Type: String

Pattern: `^(\d{12})$`

Required: No

DirectoryId

Identifier of the AWS Managed Microsoft AD directory in the directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

DnsIpAddrs

IP address of the directory's domain controllers.

Type: Array of strings

Pattern: `^(?:(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)\.){3}(?:25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)$`

Required: No

DnsIpv6Addrs

IPv6 addresses of the directory's domain controllers.

Type: Array of strings

Pattern: `^(([0-9a-fA-F]{1,4}:){7,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:)`

```
{1,5}(:[0-9a-fA-F]{1,4}){1,2}|([0-9a-fA-F]{1,4}:){1,4}(:[0-9a-fA-F]
{1,4}){1,3}|([0-9a-fA-F]{1,4}:){1,3}(:[0-9a-fA-F]{1,4}){1,4}|([0-9a-fA-
F]{1,4}:){1,2}(:[0-9a-fA-F]{1,4}){1,5}|[0-9a-fA-F]{1,4}:((:[0-9a-fA-
F]{1,4}){1,6})|:((:[0-9a-fA-F]{1,4}){1,7}|:)|fe80:(:[0-9a-fA-F]{0,4})
{0,4}%[0-9a-zA-Z]{1,}|::(ffff(:0{1,4}){0,1}:){0,1}((25[0-5]|(2[0-4]|
1{0,1}[0-9]){0,1}[0-9])\.){3}(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])|
([0-9a-fA-F]{1,4}:){1,4}:((25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9])\.){3}
(25[0-5]|(2[0-4]|1{0,1}[0-9]){0,1}[0-9]))$
```

Required: No

NetworkType

Network type of the directory in the directory owner account.

Type: String

Valid Values: `Dual-stack | IPv4 | IPv6`

Required: No

RadiusSettings

Information about the RadiusSettings object server configuration.

Type: RadiusSettings object

Required: No

RadiusStatus

The status of the RADIUS server.

Type: String

Valid Values: `Creating | Completed | Failed`

Required: No

VpcSettings

Information about the VPC settings for the directory.

Type: DirectoryVpcSettingsDescription 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

RadiusSettings

Contains information about a Remote Authentication Dial In User Service (RADIUS) server.

Contents

AuthenticationProtocol

The protocol specified for your RADIUS endpoints.

Type: String

Valid Values: `PAP | CHAP | MS-CHAPv1 | MS-CHAPv2`

Required: No

DisplayLabel

Not currently used.

Type: String

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

Required: No

RadiusPort

The port that your RADIUS server is using for communications. Your self-managed network must allow inbound traffic over this port from the AWS Directory Service servers.

Type: Integer

Valid Range: Minimum value of 1025. Maximum value of 65535.

Required: No

RadiusRetries

The maximum number of times that communication with the RADIUS server is retried after the initial attempt.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 10.

Required: No

RadiusServers

The fully qualified domain name (FQDN) or IP addresses of the RADIUS server endpoints, or the FQDN or IP addresses of your RADIUS server load balancer.

Type: Array of strings

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

Required: No

RadiusServersIpv6

The IPv6 addresses of the RADIUS server endpoints or RADIUS server load balancer.

Type: Array of strings

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

Required: No

RadiusTimeout

The amount of time, in seconds, to wait for the RADIUS server to respond.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

SharedSecret

Required for enabling RADIUS on the directory.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 512.

Pattern: `^(\p{LD}|\p{Punct}| )+$`

Required: No

UseSameUsername

Not currently used.

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

RegionDescription

The replicated Region information for a directory.

Contents

DesiredNumberOfDomainControllers

The desired number of domain controllers in the specified Region for the specified directory.

Type: Integer

Valid Range: Minimum value of 2.

Required: No

DirectoryId

The identifier of the directory.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

LastUpdatedDateTime

The date and time that the Region description was last updated.

Type: Timestamp

Required: No

LaunchTime

Specifies when the Region replication began.

Type: Timestamp

Required: No

RegionName

The name of the Region. For example, `us-east-1`.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

RegionType

Specifies whether the Region is the primary Region or an additional Region.

Type: String

Valid Values: `Primary | Additional`

Required: No

Status

The status of the replication process for the specified Region.

Type: String

Valid Values: `Requested | Creating | Created | Active | Inoperable | Impaired | Restoring | RestoreFailed | Deleting | Deleted | Failed | Updating`

Required: No

StatusLastUpdatedDateTime

The date and time that the Region status was last updated.

Type: Timestamp

Required: No

VpcSettings

Contains VPC information for the CreateDirectory, CreateMicrosoftAD, or CreateHybridAD operation.

Type: DirectoryVpcSettings 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

RegionsInfo

Provides information about the Regions that are configured for multi-Region replication.

Contents

AdditionalRegions

Lists the Regions where the directory has been replicated, excluding the primary Region.

Type: Array of strings

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

PrimaryRegion

The Region where the AWS Managed Microsoft AD directory was originally created.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

See Also

For 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

SchemaExtensionInfo

Information about a schema extension.

Contents

Description

A description of the schema extension.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

DirectoryId

The identifier of the directory to which the schema extension is applied.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

EndDateTime

The date and time that the schema extension was completed.

Type: Timestamp

Required: No

SchemaExtensionId

The identifier of the schema extension.

Type: String

Pattern: `^e-[0-9a-f]{10}$`

Required: No

SchemaExtensionStatus

The current status of the schema extension.

Type: String

Valid Values: `Initializing | CreatingSnapshot | UpdatingSchema | Replicating | CancelInProgress | RollbackInProgress | Cancelled | Failed | Completed`

Required: No

SchemaExtensionStatusReason

The reason for the `SchemaExtensionStatus`.

Type: String

Required: No

StartDateTime

The date and time that the schema extension started being applied to the directory.

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

Setting

Contains information about the configurable settings for a directory.

Contents

Name

The name of the directory setting. For example:

`TLS_1_0`

Type: String

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

Pattern: `^[a-zA-Z0-9-/. _]*$`

Required: Yes

Value

The value of the directory setting for which to retrieve information. For example, for `TLS_1_0`, the valid values are: `Enable` and `Disable`.

Type: String

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

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

SettingEntry

Contains information about the specified configurable setting for a directory.

Contents

AllowedValues

The valid range of values for the directory setting. These values depend on the `DataType` of your directory.

Type: String

Required: No

AppliedValue

The value of the directory setting that is applied to the directory.

Type: String

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

Pattern: `^[a-zA-Z0-9_]*$`

Required: No

DataType

The data type of a directory setting. This is used to define the `AllowedValues` of a setting. For example a data type can be `Boolean`, `DurationInSeconds`, or `Enum`.

Type: String

Required: No

LastRequestedDateTime

The date and time when the request to update a directory setting was last submitted.

Type: Timestamp

Required: No

LastUpdatedDateTime

The date and time when the directory setting was last updated.

Type: Timestamp

Required: No

Name

The name of the directory setting. For example:

`TLS_1_0`

Type: String

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

Pattern: `^[a-zA-Z0-9-/. _]*$`

Required: No

RequestDetailedStatus

Details about the status of the request to update the directory setting. If the directory setting is deployed in more than one region, status is returned for the request in each region where the setting is deployed.

Type: String to string map

Key Length Constraints: Minimum length of 8. Maximum length of 32.

Valid Values: `Requested | Updating | Updated | Failed | Default`

Required: No

RequestedValue

The value that was last requested for the directory setting.

Type: String

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

Pattern: `^[a-zA-Z0-9_]*$`

Required: No

RequestStatus

The overall status of the request to update the directory setting request. If the directory setting is deployed in more than one region, and the request fails in any region, the overall status is `Failed`.

Type: String

Valid Values: `Requested | Updating | Updated | Failed | Default`

Required: No

RequestStatusMessage

The last status message for the directory status request.

Type: String

Required: No

Type

The type, or category, of a directory setting. Similar settings have the same type. For example, `Protocol`, `Cipher`, or `Certificate-Based Authentication`.

Type: String

Required: No

See Also

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

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

SharedDirectory

Details about the shared directory in the directory owner account for which the share request in the directory consumer account has been accepted.

Contents

CreatedDateTime

The date and time that the shared directory was created.

Type: Timestamp

Required: No

LastUpdatedDateTime

The date and time that the shared directory was last updated.

Type: Timestamp

Required: No

OwnerAccountId

Identifier of the directory owner account, which contains the directory that has been shared to the consumer account.

Type: String

Pattern: `^(\d{12})$`

Required: No

OwnerDirectoryId

Identifier of the directory in the directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

SharedAccountId

Identifier of the directory consumer account that has access to the shared directory (`OwnerDirectoryId`) in the directory owner account.

Type: String

Pattern: `^(\d{12})$`

Required: No

SharedDirectoryId

Identifier of the shared directory in the directory consumer account. This identifier is different for each directory owner account.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

ShareMethod

The method used when sharing a directory to determine whether the directory should be shared within your AWS organization (`ORGANIZATIONS`) or with any AWS account by sending a shared directory request (`HANDSHAKE`).

Type: String

Valid Values: `ORGANIZATIONS | HANDSHAKE`

Required: No

ShareNotes

A directory share request that is sent by the directory owner to the directory consumer. The request includes a typed message to help the directory consumer administrator determine whether to approve or reject the share invitation.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

ShareStatus

Current directory status of the shared AWS Managed Microsoft AD directory.

Type: String

Valid Values: `Shared | PendingAcceptance | Rejected | Rejecting | RejectFailed | Sharing | ShareFailed | Deleted | Deleting`

Required: No

See Also

For 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

ShareTarget

Identifier that contains details about the directory consumer account.

Contents

Id

Identifier of the directory consumer account.

Type: String

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

Required: Yes

Type

Type of identifier to be used in the `Id` field.

Type: String

Valid Values: `ACCOUNT`

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

Snapshot

Describes a directory snapshot.

Contents

DirectoryId

The directory identifier.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

Name

The descriptive name of the snapshot.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 128.

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]*$`

Required: No

SnapshotId

The snapshot identifier.

Type: String

Pattern: `^s-[0-9a-f]{10}$`

Required: No

StartTime

The date and time that the snapshot was taken.

Type: Timestamp

Required: No

Status

The snapshot status.

Type: String

Valid Values: `Creating | Completed | Failed`

Required: No

Type

The snapshot type.

Type: String

Valid Values: `Auto | Manual`

Required: No

See Also

For 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

SnapshotLimits

Contains manual snapshot limit information for a directory.

Contents

ManualSnapshotsCurrentCount

The current number of manual snapshots of the directory.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

ManualSnapshotsLimit

The maximum number of manual snapshots allowed.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

ManualSnapshotsLimitReached

Indicates if the manual snapshot limit has been reached.

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

Tag

Metadata assigned to a directory consisting of a key-value pair.

Contents

Key

Required name of the tag. The string value can be Unicode characters and cannot be prefixed with "aws:". The string can contain only the set of Unicode letters, digits, white-space, '_', '.', '/', '=', '+', '-', ':', '@'(Java regex: "^([\\p{L}\\p{Z}\\p{N}_.:/=+\\-]*)$").

Type: String

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

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

Required: Yes

Value

The optional value of the tag. The string value can be Unicode characters. The string can contain only the set of Unicode letters, digits, white-space, '_', '.', '/', '=', '+', '-', ':', '@' (Java regex: "^([\\p{L}\\p{Z}\\p{N}_.:/=+\\-]*)$").

Type: String

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

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

Required: Yes

See Also

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

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

- AWS SDK for Ruby V3

Trust

Describes a trust relationship between an AWS Managed Microsoft AD directory and an external domain.

Contents

CreatedDateTime

The date and time that the trust relationship was created.

Type: Timestamp

Required: No

DirectoryId

The Directory ID of the AWS directory involved in the trust relationship.

Type: String

Pattern: `^d-[0-9a-f]{10}$`

Required: No

LastUpdatedDateTime

The date and time that the trust relationship was last updated.

Type: Timestamp

Required: No

RemoteDomainName

The Fully Qualified Domain Name (FQDN) of the external domain involved in the trust relationship.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^([a-zA-Z0-9]+[\\.-])+([a-zA-Z0-9])+[.]?$`

Required: No

SelectiveAuth

Current state of selective authentication for the trust.

Type: String

Valid Values: `Enabled | Disabled`

Required: No

StateLastUpdatedDateTime

The date and time that the TrustState was last updated.

Type: Timestamp

Required: No

TrustDirection

The trust relationship direction.

Type: String

Valid Values: `One-Way: Outgoing | One-Way: Incoming | Two-Way`

Required: No

TrustId

The unique ID of the trust relationship.

Type: String

Pattern: `^t-[0-9a-f]{10}$`

Required: No

TrustState

The trust relationship state.

Type: String

Valid Values: `Creating | Created | Verifying | VerifyFailed | Verified | Updating | UpdateFailed | Updated | Deleting | Deleted | Failed`

Required: No

TrustStateReason

The reason for the TrustState.

Type: String

Required: No

TrustType

The trust relationship type. `Forest` is the default.

Type: String

Valid Values: `Forest | External`

Required: No

See Also

For 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

UnshareTarget

Identifier that contains details about the directory consumer account with whom the directory is being unshared.

Contents

Id

Identifier of the directory consumer account.

Type: String

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

Required: Yes

Type

Type of identifier to be used in the *Id* field.

Type: String

Valid Values: `ACCOUNT`

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

UpdateInfoEntry

An entry of update information related to a requested update type.

Contents

InitiatedBy

This specifies if the update was initiated by the customer or by the service team.

Type: String

Required: No

LastUpdatedDateTime

The last updated date and time of a particular directory setting.

Type: Timestamp

Required: No

NewValue

The new value of the target setting.

Type: UpdateValue object

Required: No

PreviousValue

The old value of the target setting.

Type: UpdateValue object

Required: No

Region

The name of the Region.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Required: No

StartTime

The start time of the `UpdateDirectorySetup` for the particular type.

Type: Timestamp

Required: No

Status

The status of the update performed on the directory.

Type: String

Valid Values: `Updated | Updating | UpdateFailed`

Required: No

StatusReason

The reason for the current status of the update type activity.

Type: String

Required: No

See Also

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

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

UpdateValue

The value for a given type of `UpdateSettings`.

Contents

OSUpdateSettings

The OS update related settings.

Type: OSUpdateSettings 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

Common Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

NotAuthorized

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

OptInRequired

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

RequestAbortedException

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

RequestEntityTooLargeException

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

RequestTimeoutException

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

ServiceUnavailable

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

ThrottlingException

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

UnknownOperationException

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

UnrecognizedClientException

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

ValidationError

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400