aws

API Reference

DataSync



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DataSync: API Reference

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Table of Contents

Welcome **1**
Actions **2**
CancelTaskExecution 4
Request Syntax 4
Request Parameters 4
Response Elements 4
Errors 5
See Also 5
CreateAgent 6
Request Syntax 6
Request Parameters 6
Response Syntax 8
Response Elements 9
Errors 9
Examples 9
See Also 10
CreateLocationAzureBlob 11
Request Syntax 11
Request Parameters 11
Response Syntax 15
Response Elements 15
Errors 16
See Also 16
CreateLocationEfs 18
Request Syntax 18
Request Parameters 18
Response Syntax 21
Response Elements 21
Errors 21
Examples 22
See Also 23
CreateLocationFsxLustre 24
Request Syntax 24
Request Parameters 24

Response Syntax ... 26
Response Elements ... 26
Errors ... 26
See Also ... 27
CreateLocationFsxOntap ... 28
Request Syntax ... 28
Request Parameters ... 29
Response Syntax ... 31
Response Elements ... 31
Errors ... 31
See Also ... 32
CreateLocationFsxOpenZfs ... 33
Request Syntax ... 33
Request Parameters ... 34
Response Syntax ... 35
Response Elements ... 36
Errors ... 36
See Also ... 36
CreateLocationFsxWindows ... 38
Request Syntax ... 38
Request Parameters ... 38
Response Syntax ... 42
Response Elements ... 42
Errors ... 43
See Also ... 43
CreateLocationHdfs ... 44
Request Syntax ... 44
Request Parameters ... 45
Response Syntax ... 50
Response Elements ... 50
Errors ... 50
See Also ... 51
CreateLocationNfs ... 52
Request Syntax ... 52
Request Parameters ... 52
Response Syntax ... 54

Response Elements ... 54
Errors ... 54
Examples ... 55
See Also ... 55
CreateLocationObjectStorage ... 57
Request Syntax ... 57
Request Parameters ... 57
Response Syntax ... 62
Response Elements ... 62
Errors ... 63
See Also ... 63
CreateLocationS3 ... 65
Request Syntax ... 65
Request Parameters ... 65
Response Syntax ... 68
Response Elements ... 68
Errors ... 68
See Also ... 69
CreateLocationSmb ... 70
Request Syntax ... 70
Request Parameters ... 71
Response Syntax ... 76
Response Elements ... 76
Errors ... 77
Examples ... 77
See Also ... 78
CreateTask ... 80
Request Syntax ... 80
Request Parameters ... 82
Response Syntax ... 86
Response Elements ... 86
Errors ... 86
Examples ... 87
See Also ... 88
DeleteAgent ... 90
Request Syntax ... 90

Request Parameters ... 90
Response Elements ... 90
Errors ... 90
See Also ... 91
DeleteLocation ... 92
Request Syntax ... 92
Request Parameters ... 92
Response Elements ... 92
Errors ... 92
See Also ... 93
DeleteTask ... 94
Request Syntax ... 94
Request Parameters ... 94
Response Elements ... 94
Errors ... 94
See Also ... 95
DescribeAgent ... 96
Request Syntax ... 96
Request Parameters ... 96
Response Syntax ... 96
Response Elements ... 97
Errors ... 98
Examples ... 99
See Also ... 99
DescribeLocationAzureBlob ... 101
Request Syntax ... 101
Request Parameters ... 101
Response Syntax ... 101
Response Elements ... 102
Errors ... 104
See Also ... 104
DescribeLocationEfs ... 106
Request Syntax ... 106
Request Parameters ... 106
Response Syntax ... 106
Response Elements ... 107

Errors 108
Examples 109
See Also 110
DescribeLocationFsxLustre 112
Request Syntax 112
Request Parameters 112
Response Syntax 112
Response Elements 113
Errors 114
See Also 114
DescribeLocationFsxOntap 115
Request Syntax 115
Request Parameters 115
Response Syntax 115
Response Elements 116
Errors 118
See Also 118
DescribeLocationFsxOpenZfs 120
Request Syntax 120
Request Parameters 120
Response Syntax 120
Response Elements 121
Errors 122
See Also 123
DescribeLocationFsxWindows 124
Request Syntax 124
Request Parameters 124
Response Syntax 124
Response Elements 125
Errors 127
See Also 127
DescribeLocationHdfs 129
Request Syntax 129
Request Parameters 129
Response Syntax 129
Response Elements 130

Errors ... 133
See Also ... 134
DescribeLocationNfs ... 135
Request Syntax ... 135
Request Parameters ... 135
Response Syntax ... 135
Response Elements ... 136
Errors ... 137
Examples ... 137
See Also ... 138
DescribeLocationObjectStorage ... 139
Request Syntax ... 139
Request Parameters ... 139
Response Syntax ... 139
Response Elements ... 140
Errors ... 142
See Also ... 143
DescribeLocationS3 ... 144
Request Syntax ... 144
Request Parameters ... 144
Response Syntax ... 144
Response Elements ... 145
Errors ... 146
Examples ... 147
See Also ... 147
DescribeLocationSmb ... 149
Request Syntax ... 149
Request Parameters ... 149
Response Syntax ... 149
Response Elements ... 150
Errors ... 153
Examples ... 153
See Also ... 154
DescribeTask ... 156
Request Syntax ... 156
Request Parameters ... 156

Response Syntax ... 156
Response Elements ... 159
Errors ... 163
Examples ... 163
See Also ... 164
DescribeTaskExecution ... 165
Request Syntax ... 165
Request Parameters ... 165
Response Syntax ... 166
Response Elements ... 169
Errors ... 178
Examples ... 179
See Also ... 185
ListAgents ... 186
Request Syntax ... 186
Request Parameters ... 186
Response Syntax ... 187
Response Elements ... 187
Errors ... 188
See Also ... 188
ListLocations ... 189
Request Syntax ... 189
Request Parameters ... 189
Response Syntax ... 190
Response Elements ... 190
Errors ... 191
See Also ... 191
ListTagsForResource ... 193
Request Syntax ... 193
Request Parameters ... 193
Response Syntax ... 194
Response Elements ... 194
Errors ... 195
See Also ... 195
ListTaskExecutions ... 196
Request Syntax ... 196

Request Parameters ... 196
Response Syntax ... 197
Response Elements ... 197
Errors ... 198
See Also ... 198
ListTasks ... 199
Request Syntax ... 199
Request Parameters ... 199
Response Syntax ... 200
Response Elements ... 200
Errors ... 201
See Also ... 201
StartTaskExecution ... 202
Request Syntax ... 202
Request Parameters ... 204
Response Syntax ... 206
Response Elements ... 206
Errors ... 207
Examples ... 207
See Also ... 208
TagResource ... 209
Request Syntax ... 209
Request Parameters ... 209
Response Elements ... 210
Errors ... 210
See Also ... 210
UntagResource ... 212
Request Syntax ... 212
Request Parameters ... 212
Response Elements ... 213
Errors ... 213
See Also ... 213
UpdateAgent ... 215
Request Syntax ... 215
Request Parameters ... 215
Response Elements ... 216

Errors ... 216
See Also ... 216
UpdateLocationAzureBlob ... 217
Request Syntax ... 217
Request Parameters ... 217
Response Elements ... 220
Errors ... 220
See Also ... 220
UpdateLocationEfs ... 222
Request Syntax ... 222
Request Parameters ... 222
Response Elements ... 224
Errors ... 224
See Also ... 224
UpdateLocationFsxLustre ... 226
Request Syntax ... 226
Request Parameters ... 226
Response Elements ... 227
Errors ... 227
See Also ... 227
UpdateLocationFsxOntap ... 229
Request Syntax ... 229
Request Parameters ... 229
Response Elements ... 231
Errors ... 231
See Also ... 231
UpdateLocationFsxOpenZfs ... 233
Request Syntax ... 233
Request Parameters ... 234
Response Elements ... 235
Errors ... 235
See Also ... 235
UpdateLocationFsxWindows ... 237
Request Syntax ... 237
Request Parameters ... 237
Response Elements ... 239

Errors ... 239
See Also ... 240
UpdateLocationHdfs ... 241
Request Syntax ... 241
Request Parameters ... 242
Response Elements ... 246
Errors ... 246
See Also ... 246
UpdateLocationNfs ... 248
Request Syntax ... 248
Request Parameters ... 248
Response Elements ... 250
Errors ... 250
See Also ... 250
UpdateLocationObjectStorage ... 251
Request Syntax ... 251
Request Parameters ... 251
Response Elements ... 255
Errors ... 255
See Also ... 256
UpdateLocationS3 ... 257
Request Syntax ... 257
Request Parameters ... 257
Response Elements ... 259
Errors ... 259
See Also ... 259
UpdateLocationSmb ... 261
Request Syntax ... 261
Request Parameters ... 261
Response Elements ... 267
Errors ... 267
See Also ... 267
UpdateTask ... 269
Request Syntax ... 269
Request Parameters ... 271
Response Elements ... 273

Errors ... 274
See Also ... 274
UpdateTaskExecution ... 275
Request Syntax ... 275
Request Parameters ... 275
Response Elements ... 276
Errors ... 276
See Also ... 277
Data Types ... 278
AgentListEntry ... 280
Contents ... 280
See Also ... 281
AzureBlobSasConfiguration ... 282
Contents ... 282
See Also ... 282
CmkSecretConfig ... 283
Contents ... 283
See Also ... 284
CustomSecretConfig ... 285
Contents ... 285
See Also ... 286
Ec2Config ... 287
Contents ... 287
See Also ... 288
FilterRule ... 289
Contents ... 289
See Also ... 289
FsxProtocol ... 291
Contents ... 291
See Also ... 291
FsxProtocolNfs ... 292
Contents ... 292
See Also ... 292
FsxProtocolSmb ... 293
Contents ... 293
See Also ... 295

FsxUpdateProtocol ... 296
Contents ... 296
See Also ... 296
FsxUpdateProtocolSmb ... 297
Contents ... 297
See Also ... 298
HdfsNameNode ... 300
Contents ... 300
See Also ... 300
LocationFilter ... 302
Contents ... 302
See Also ... 303
LocationListEntry ... 304
Contents ... 304
See Also ... 305
ManagedSecretConfig ... 306
Contents ... 306
See Also ... 306
ManifestConfig ... 307
Contents ... 307
See Also ... 308
NfsMountOptions ... 309
Contents ... 309
See Also ... 310
OnPremConfig ... 311
Contents ... 311
See Also ... 311
Options ... 312
Contents ... 312
See Also ... 320
Platform ... 321
Contents ... 321
See Also ... 321
PrivateLinkConfig ... 322
Contents ... 322
See Also ... 323

QopConfiguration 324
Contents 324
See Also 324
ReportDestination 325
Contents 325
See Also 325
ReportDestinationS3 326
Contents 326
See Also 327
ReportOverride 328
Contents 328
See Also 328
ReportOverrides 329
Contents 329
See Also 330
ReportResult 331
Contents 331
See Also 331
S3Config 333
Contents 333
See Also 333
S3ManifestConfig 334
Contents 334
See Also 335
SmbMountOptions 336
Contents 336
See Also 337
SourceManifestConfig 338
Contents 338
See Also 338
TagListEntry 339
Contents 339
See Also 339
TaskExecutionFilesFailedDetail 340
Contents 340
See Also 341

TaskExecutionFilesListedDetail ... 342
Contents ... 342
See Also ... 342
TaskExecutionFoldersFailedDetail ... 344
Contents ... 344
See Also ... 345
TaskExecutionFoldersListedDetail ... 346
Contents ... 346
See Also ... 346
TaskExecutionListEntry ... 348
Contents ... 348
See Also ... 349
TaskExecutionResultDetail ... 350
Contents ... 350
See Also ... 352
TaskFilter ... 353
Contents ... 353
See Also ... 354
TaskListEntry ... 355
Contents ... 355
See Also ... 356
TaskReportConfig ... 357
Contents ... 357
See Also ... 358
TaskSchedule ... 359
Contents ... 359
See Also ... 360
TaskScheduleDetails ... 361
Contents ... 361
See Also ... 362
Common Parameters ... 363
Common Error Types ... 366

Welcome

In addition to the AWS Management Console and AWS Command Line Interface, you can use the AWS DataSync API to configure and manage DataSync with the AWS SDKs.

AWS DataSync is an online data movement service that simplifies data migration and helps you quickly, easily, and securely transfer your file or object data to, from, and between AWS storage services.

This API interface reference includes documentation for using DataSync programmatically. For complete information, see the *AWS DataSync User Guide* .

This document was last published on November 3, 2026.

Actions

The following actions are supported:

- CancelTaskExecution
- CreateAgent
- CreateLocationAzureBlob
- CreateLocationEfs
- CreateLocationFsxLustre
- CreateLocationFsxOntap
- CreateLocationFsxOpenZfs
- CreateLocationFsxWindows
- CreateLocationHdfs
- CreateLocationNfs
- CreateLocationObjectStorage
- CreateLocationS3
- CreateLocationSmb
- CreateTask
- DeleteAgent
- DeleteLocation
- DeleteTask
- DescribeAgent
- DescribeLocationAzureBlob
- DescribeLocationEfs
- DescribeLocationFsxLustre
- DescribeLocationFsxOntap
- DescribeLocationFsxOpenZfs
- DescribeLocationFsxWindows
- DescribeLocationHdfs
- DescribeLocationNfs
- DescribeLocationObjectStorage

- DescribeLocationS3
- DescribeLocationSmb
- DescribeTask
- DescribeTaskExecution
- ListAgents
- ListLocations
- ListTagsForResource
- ListTaskExecutions
- ListTasks
- StartTaskExecution
- TagResource
- UntagResource
- UpdateAgent
- UpdateLocationAzureBlob
- UpdateLocationEfs
- UpdateLocationFsxLustre
- UpdateLocationFsxOntap
- UpdateLocationFsxOpenZfs
- UpdateLocationFsxWindows
- UpdateLocationHdfs
- UpdateLocationNfs
- UpdateLocationObjectStorage
- UpdateLocationS3
- UpdateLocationSmb
- UpdateTask
- UpdateTaskExecution

CancelTaskExecution

Stops an AWS DataSync task execution that's in progress. The transfer of some files are abruptly interrupted. File contents that're transferred to the destination might be incomplete or inconsistent with the source files.

However, if you start a new task execution using the same task and allow it to finish, file content on the destination will be complete and consistent. This applies to other unexpected failures that interrupt a task execution. In all of these cases, DataSync successfully completes the transfer when you start the next task execution.

Request Syntax

```
{
   "TaskExecutionArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

TaskExecutionArn

The Amazon Resource Name (ARN) of the task execution to stop.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateAgent

Activates an AWS DataSync agent that you deploy in your storage environment. The activation process associates the agent with your AWS account.

If you haven't deployed an agent yet, see Do I need a DataSync agent?

Request Syntax

```
{
   "ActivationKey": "string",
   "AgentName": "string",
   "SecurityGroupArns": [ "string" ],
   "SubnetArns": [ "string" ],
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "VpcEndpointId": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

ActivationKey

Specifies your DataSync agent's activation key. If you don't have an activation key, see Activating your agent.

Type: String

Length Constraints: Maximum length of 29.

Pattern: `[A-Z0-9]{5}(-[A-Z0-9]{5}){4}`

Required: Yes

AgentName

Specifies a name for your agent. We recommend specifying a name that you can remember.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Required: No

SecurityGroupArns

Specifies the Amazon Resource Name (ARN) of the security group that allows traffic between your agent and VPC service endpoint. You can only specify one ARN.

The ARN must specify your own account, even when the security group was shared with you from the account that owns the VPC. The security group must belong to the same VPC as the subnet that you specify in `SubnetArns`.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: No

SubnetArns

Specifies the ARN of the subnet where DataSync creates the network interfaces that handle data transfer traffic for your tasks. You can only specify one ARN.

The subnet doesn't have to be the subnet that contains your VPC service endpoint. The subnet can be one that another AWS account shared with you through AWS RAM, in which case the ARN must specify the account that owns the subnet. For more information, see Using a single VPC service endpoint across multiple subnets.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:subnet/subnet-[a-f0-9]+$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least one tag for your agent.

Type: Array of TagListEntry objects

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

Required: No

VpcEndpointId

Specifies the ID of the VPC service endpoint that you're using. For example, a VPC endpoint ID looks like `vpce-01234d5aff67890e1`.

> **Important**
>
> The VPC service endpoint you use must include the DataSync service name (for example, `com.amazonaws.us-east-2.datasync`).

The endpoint ID is informational. DataSync doesn't verify it or use it to connect to your agent. For more information, see Using a single VPC service endpoint across multiple subnets.

Type: String

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

Required: No

Response Syntax

```
{
   "AgentArn": "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.

AgentArn

The ARN of the agent that you just activated. Use the ListAgents operation to return a list of agents in your AWS account and AWS Region.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example activates a DataSync agent.

```
{
    "ActivationKey": "AAAAA-1AAAA-BB1CC-33333-EEEEE",
    "AgentName": "MyAgent",
    "Tags": [{
        "Key": "Job",
        "Value": "TransferJob-1"
    }]
}
```

Sample Response

The response returns the ARN of the activated agent.

```
{
    "AgentArn": "arn:aws:datasync:us-east-2:111222333444:agent/agent-0b0addbeef44baca3"
}
```

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

CreateLocationAzureBlob

Creates a transfer *location* for a Microsoft Azure Blob Storage container. AWS DataSync can use this location as a transfer source or destination. You can make transfers with or without a DataSync agent that connects to your container.

Before you begin, make sure you know how DataSync accesses Azure Blob Storage and works with access tiers and blob types.

Request Syntax

```
{
   "AccessTier": "string",
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlobType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "ContainerUrl": "string",
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "SasConfiguration": {
      "Token": "string"
   },
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessTier

Specifies the access tier that you want your objects or files transferred into. This only applies when using the location as a transfer destination. For more information, see Access tiers.

Type: String

Valid Values: `HOT | COOL | ARCHIVE`

Required: No

AgentArns

(Optional) Specifies the Amazon Resource Name (ARN) of the DataSync agent that can connect with your Azure Blob Storage container. If you are setting up an agentless cross-cloud transfer, you do not need to specify a value for this parameter.

You can specify more than one agent. For more information, see Using multiple agents for your transfer.

> **Note**
>
> Make sure you configure this parameter correctly when you first create your storage location. You cannot add or remove agents from a storage location after you create it.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

AuthenticationType

Specifies the authentication method DataSync uses to access your Azure Blob Storage. DataSync can access blob storage using a shared access signature (SAS).

Type: String

Valid Values: SAS | NONE

Required: Yes

BlobType

Specifies the type of blob that you want your objects or files to be when transferring them into Azure Blob Storage. Currently, DataSync only supports moving data into Azure Blob Storage as block blobs. For more information on blob types, see the Azure Blob Storage documentation.

Type: String

Valid Values: BLOCK

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, which includes the authentication token that DataSync uses to access a specific AzureBlob storage location, with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationAzureBlob` request, you provide only the KMS key ARN. DataSync uses this KMS key together with the authentication token you specify for `SasConfiguration` to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with `SasConfiguration`) or `CustomSecretConfig` (without `SasConfiguration`) to provide credentials for a `CreateLocationAzureBlob` request. Do not provide both parameters for the same request.

Type: CmkSecretConfig object

Required: No

ContainerUrl

Specifies the URL of the Azure Blob Storage container involved in your transfer.

Type: String

Length Constraints: Maximum length of 325.

Pattern: `^https:\/\/[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}\/[a-z0-9](-?[a-z0-9]){2,62}$`

Required: Yes

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the authentication token for an AzureBlob storage location is stored in plain text, in Secrets Manager. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `SasConfiguration`) or `CustomSecretConfig` (without `SasConfiguration`) to provide credentials for a `CreateLocationAzureBlob` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

SasConfiguration

Specifies the SAS configuration that allows DataSync to access your Azure Blob Storage.

> **Note**
>
> If you provide an authentication token using `SasConfiguration`, but do not provide secret configuration details using `CmkSecretConfig` or `CustomSecretConfig`, then DataSync stores the token using your AWS account's secrets manager secret.

Type: AzureBlobSasConfiguration object

Required: No

Subdirectory

Specifies path segments if you want to limit your transfer to a virtual directory in your container (for example, `/my/images`).

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^[\p{L}\p{M}\p{Z}\p{S}\p{N}\p{P}\p{C}]*$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your transfer location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the Azure Blob Storage transfer location that you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationEfs

Creates a transfer *location* for an Amazon EFS file system. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses Amazon EFS file systems.

Request Syntax

```
{
   "AccessPointArn": "string",
   "Ec2Config": {
      "SecurityGroupArns": [ "string" ],
      "SubnetArn": "string"
   },
   "EfsFilesystemArn": "string",
   "FileSystemAccessRoleArn": "string",
   "InTransitEncryption": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessPointArn

Specifies the Amazon Resource Name (ARN) of the access point that DataSync uses to mount your Amazon EFS file system.

For more information, see Accessing restricted file systems.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):elasticfilesystem:[a-z\-0-9]+:[0-9]{12}:access-point/fsap-[0-9a-f]{8,40}$`

Required: No

Ec2Config

Specifies the subnet and security groups DataSync uses to connect to one of your Amazon EFS file system's mount targets.

Type: Ec2Config object

Required: Yes

EfsFilesystemArn

Specifies the ARN for your Amazon EFS file system.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):elasticfilesystem:[a-z\-0-9]+:[0-9]{12}:file-system/fs-[0-9a-f]{8,40}$`

Required: Yes

FileSystemAccessRoleArn

Specifies an AWS Identity and Access Management (IAM) role that allows DataSync to access your Amazon EFS file system.

For information on creating this role, see Creating a DataSync IAM role for file system access.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$`

Required: No

InTransitEncryption

Specifies whether you want DataSync to use Transport Layer Security (TLS) 1.2 encryption when it transfers data to or from your Amazon EFS file system.

If you specify an access point using `AccessPointArn` or an IAM role using `FileSystemAccessRoleArn`, you must set this parameter to `TLS1_2`.

Type: String

Valid Values: `NONE | TLS1_2`

Required: No

Subdirectory

Specifies a mount path for your Amazon EFS file system. This is where DataSync reads or writes data on your file system (depending on if this is a source or destination location).

By default, DataSync uses the root directory (or access point if you provide one by using `AccessPointArn`). You can also include subdirectories using forward slashes (for example, `/path/to/folder`).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

Required: No

Tags

Specifies the key-value pair that represents a tag that you want to add to the resource. The value can be an empty string. This value helps you manage, filter, and search for your resources. We recommend that you create a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The Amazon Resource Name (ARN) of the Amazon EFS file system location that you create.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example creates a location for an Amazon EFS file system.

```
{
    "Ec2Config": {
        "SubnetArn": "arn:aws:ec2:us-east-2:11122233344:subnet/
subnet-1234567890abcdef1",
        "SecurityGroupArns": [
            "arn:aws:ec2:us-east-2:11122233344:security-group/sg-1234567890abcdef2"
        ]
    },
    "EfsFilesystemArn": "arn:aws:elasticfilesystem:us-east-2:111222333444:file-system/
fs-021345abcdef6789",
    "Subdirectory": "/mount/path",
    "Tags": [{
        "Key": "Name",
        "Value": "ElasticFileSystem-1"
    }]
}
```

Sample Request: Creating a location for a restricted Amazon EFS file system

The following example creates a location for an Amazon EFS file system with restricted access. In this kind of scenario, you might have to specify values for `AccessPointArn`, `FileSystemAccessRoleArn`, and `InTransitEncryption` in your request.

```
{
    "AccessPointArn": "arn:aws:elasticfilesystem:us-east-2:111222333444:access-point/
fsap-1234567890abcdef0",
    "Ec2Config": {
        "SubnetArn": "arn:aws:ec2:us-east-2:111222333444:subnet/
subnet-1234567890abcdef1",
        "SecurityGroupArns": [
            "arn:aws:ec2:us-east-2:111222333444:security-group/sg-1234567890abcdef2"
        ]
    },
    "FileSystemAccessRoleArn": "arn:aws:iam::111222333444:role/
AwsDataSyncFullAccessNew",
    "InTransitEncryption": "TLS1_2",
```

```
    "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/loc-
abcdef01234567890",
    "LocationUri": "efs://us-east-2.fs-021345abcdef6789/",
    "Subdirectory": "/mount/path",
    "Tags": [{
        "Key": "Name",
        "Value": "ElasticFileSystem-1"
    }]
}
```

Sample Response

A response returns the location ARN of the Amazon EFS file system.

```
{
  "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-12abcdef012345678"
}
```

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

CreateLocationFsxLustre

Creates a transfer *location* for an Amazon FSx for Lustre file system. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses FSx for Lustre file systems.

Request Syntax

```
{
   "FsxFilesystemArn": "string",
   "SecurityGroupArns": [ "string" ],
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

FsxFilesystemArn

Specifies the Amazon Resource Name (ARN) of the FSx for Lustre file system.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:file-system/fs-[0-9a-f]+$`

Required: Yes

SecurityGroupArns

Specifies the Amazon Resource Names (ARNs) of up to five security groups that provide access to your FSx for Lustre file system.

The security groups must be able to access the file system's ports. The file system must also allow access from the security groups. For information about file system access, see the *Amazon FSx for Lustre User Guide*.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: Yes

Subdirectory

Specifies a mount path for your FSx for Lustre file system. The path can include subdirectories.

When the location is used as a source, DataSync reads data from the mount path. When the location is used as a destination, DataSync writes data to the mount path. If you don't include this parameter, DataSync uses the file system's root directory (*/*).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The Amazon Resource Name (ARN) of the FSx for Lustre file system location that you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationFsxOntap

Creates a transfer *location* for an Amazon FSx for NetApp ONTAP file system. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses FSx for ONTAP file systems.

Request Syntax

```
{
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "ManagedSecretConfig": {
            "SecretArn": "string"
         },
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
         "User": "string"
      }
   },
   "SecurityGroupArns": [ "string" ],
   "StorageVirtualMachineArn": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
```

```
            "Value": "string"
        }
    ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Protocol

Specifies the data transfer protocol that AWS DataSync uses to access your Amazon FSx file system.

Type: FsxProtocol object

Required: Yes

SecurityGroupArns

Specifies the Amazon EC2 security groups that provide access to your file system's preferred subnet.

The security groups must allow outbound traffic on the following ports (depending on the protocol you use):

- **Network File System (NFS)**: TCP ports 111, 635, and 2049
- **Server Message Block (SMB)**: TCP port 445

Your file system's security groups must also allow inbound traffic on the same ports.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: Yes

StorageVirtualMachineArn

Specifies the ARN of the storage virtual machine (SVM) in your file system where you want to copy data to or from.

Type: String

Length Constraints: Maximum length of 162.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:storage-virtual-machine/fs-[0-9a-f]+/svm-[0-9a-f]{17,}$`

Required: Yes

Subdirectory

Specifies a path to the file share in the SVM where you want to transfer data to or from.

You can specify a junction path (also known as a mount point), qtree path (for NFS file shares), or share name (for SMB file shares). For example, your mount path might be `/vol1`, `/vol1/tree1`, or `/share1`.

> **Note**
>
> Don't specify a junction path in the SVM's root volume. For more information, see Managing FSx for ONTAP storage virtual machines in the *Amazon FSx for NetApp ONTAP User Guide*.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^[^\u0000\u0085\u2028\u2029\r\n]{1,255}$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

Specifies the ARN of the FSx for ONTAP file system location that you create.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationFsxOpenZfs

Creates a transfer *location* for an Amazon FSx for OpenZFS file system. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses FSx for OpenZFS file systems.

> **Note**
>
> Request parameters related to SMB aren't supported with the `CreateLocationFsxOpenZfs` operation.

Request Syntax

```
{
   "FsxFilesystemArn": "string",
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "ManagedSecretConfig": {
            "SecretArn": "string"
         },
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
```

```
         "User": "string"
      }
   },
   "SecurityGroupArns": [ "string" ],
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

FsxFilesystemArn

The Amazon Resource Name (ARN) of the FSx for OpenZFS file system.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:file-system/fs-[0-9a-f]+$`

Required: Yes

Protocol

The type of protocol that AWS DataSync uses to access your file system.

Type: FsxProtocol object

Required: Yes

SecurityGroupArns

The ARNs of the security groups that are used to configure the FSx for OpenZFS file system.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: Yes

Subdirectory

A subdirectory in the location's path that must begin with `/fsx`. DataSync uses this subdirectory to read or write data (depending on whether the file system is a source or destination location).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[^\u0000\u0085\u2028\u2029\r\n]{1,4096}$`

Required: No

Tags

The key-value pair that represents a tag that you want to add to the resource. The value can be an empty string. This value helps you manage, filter, and search for your resources. We recommend that you create a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the FSx for OpenZFS file system location that you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationFsxWindows

Creates a transfer *location* for an Amazon FSx for Windows File Server file system. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses FSx for Windows File Server file systems.

Request Syntax

```
{
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "Domain": "string",
   "FsxFilesystemArn": "string",
   "Password": "string",
   "SecurityGroupArns": [ "string" ],
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "User": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, which includes the password that DataSync uses to access a specific FSx Windows storage location, with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationFsxWindows` request, you provide only the KMS key ARN. DataSync uses this KMS key together with the `Password` you specify for to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with `Password`) or `CustomSecretConfig` (without `Password`) to provide credentials for a `CreateLocationFsxWindows` request. Do not provide both parameters for the same request.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the password for an FSx for Windows File Server storage location is stored in plain text, in Secrets Manager. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `Password`) or `CustomSecretConfig` (without `Password`) to provide credentials for a `CreateLocationFsxWindows` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

Domain

Specifies the name of the Windows domain that the FSx for Windows File Server file system belongs to.

If you have multiple Active Directory domains in your environment, configuring this parameter makes sure that DataSync connects to the right file system.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

Required: No

FsxFilesystemArn

Specifies the Amazon Resource Name (ARN) for the FSx for Windows File Server file system.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:file-system/fs-[0-9a-f]+$`

Required: Yes

Password

Specifies the password of the user with the permissions to mount and access the files, folders, and file metadata in your FSx for Windows File Server file system.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

SecurityGroupArns

Specifies the ARNs of the Amazon EC2 security groups that provide access to your file system's preferred subnet.

The security groups that you specify must be able to communicate with your file system's security groups. For information about configuring security groups for file system access, see the *Amazon FSx for Windows File Server User Guide*.

> **Note**
>
> If you choose a security group that doesn't allow connections from within itself, do one of the following:
>
> - Configure the security group to allow it to communicate within itself.
> - Choose a different security group that can communicate with the mount target's security group.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: Yes

Subdirectory

Specifies a mount path for your file system using forward slashes. This is where DataSync reads or writes data (depending on if this is a source or destination location).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

User

Specifies the user with the permissions to mount and access the files, folders, and file metadata in your FSx for Windows File Server file system.

For information about choosing a user with the right level of access for your transfer, see required permissions for FSx for Windows File Server locations.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Required: Yes

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the FSx for Windows File Server file system location you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationHdfs

Creates a transfer *location* for a Hadoop Distributed File System (HDFS). AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses HDFS clusters.

Request Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlockSize": number,
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "KerberosKeytab": blob,
   "KerberosKrb5Conf": blob,
   "KerberosPrincipal": "string",
   "KmsKeyProviderUri": "string",
   "NameNodes": [
      {
         "Hostname": "string",
         "Port": number
      }
   ],
   "QopConfiguration": {
      "DataTransferProtection": "string",
      "RpcProtection": "string"
   },
   "ReplicationFactor": number,
   "SimpleUser": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
```

```
    ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArns

The Amazon Resource Names (ARNs) of the DataSync agents that can connect to your HDFS cluster.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: Yes

AuthenticationType

The type of authentication used to determine the identity of the user.

Type: String

Valid Values: `SIMPLE | KERBEROS`

Required: Yes

BlockSize

The size of data blocks to write into the HDFS cluster. The block size must be a multiple of 512 bytes. The default block size is 128 mebibytes (MiB).

Type: Integer

Valid Range: Minimum value of 1048576. Maximum value of 1073741824.

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, which includes the Kerberos keytab that DataSync uses to access a specific Hadoop Distributed File System (HDFS) storage location, with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationHdfs` request, you provide only the KMS key ARN. DataSync uses this KMS key together with the `KerberosKeytab` you specify for to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with `KerberosKeytab`) or `CustomSecretConfig` (without `KerberosKeytab`) to provide credentials for a `CreateLocationHdfs` request. Do not provide both parameters for the same request.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the Kerberos keytab for the HDFS storage location is stored in binary, in Secrets Manager. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `KerberosKeytab`) or `CustomSecretConfig` (without `KerberosKeytab`) to provide credentials for a `CreateLocationHdfs` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

KerberosKeytab

The Kerberos key table (keytab) that contains mappings between the defined Kerberos principal and the encrypted keys. You can load the keytab from a file by providing the file's address.

> **Note**
>
> If KERBEROS is specified for `AuthenticationType`, this parameter is required.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 65536.

Required: No

KerberosKrb5Conf

The `krb5.conf` file that contains the Kerberos configuration information. You can load the `krb5.conf` file by providing the file's address. If you're using the AWS CLI, it performs the base64 encoding for you. Otherwise, provide the base64-encoded text.

> **Note**
>
> If KERBEROS is specified for `AuthenticationType`, this parameter is required.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 131072.

Required: No

KerberosPrincipal

The Kerberos principal with access to the files and folders on the HDFS cluster.

> **Note**
>
> If KERBEROS is specified for `AuthenticationType`, this parameter is required.

Type: String

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

Pattern: `^.+$`

Required: No

KmsKeyProviderUri

The URI of the HDFS cluster's Key Management Server (KMS).

Type: String

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

Pattern: `^kms:\/\/http[s]?@(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9])(;(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9]))*:[0-9]{1,5}\/kms$`

Required: No

NameNodes

The NameNode that manages the HDFS namespace. The NameNode performs operations such as opening, closing, and renaming files and directories. The NameNode contains the information to map blocks of data to the DataNodes.

The number of NameNodes you can specify depends on the task mode:

- **Enhanced mode** – You can specify multiple NameNodes for HDFS High Availability (HA) configurations.
- **Basic mode** – You can specify only one NameNode.

Type: Array of HdfsNameNode objects

Array Members: Minimum number of 1 item.

Required: Yes

QopConfiguration

The Quality of Protection (QOP) configuration specifies the Remote Procedure Call (RPC) and data transfer protection settings configured on the Hadoop Distributed

File System (HDFS) cluster. If `QopConfiguration` isn't specified, `RpcProtection` and `DataTransferProtection` default to `PRIVACY`. If you set `RpcProtection` or `DataTransferProtection`, the other parameter assumes the same value.

Type: QopConfiguration object

Required: No

ReplicationFactor

The number of DataNodes to replicate the data to when writing to the HDFS cluster. By default, data is replicated to three DataNodes.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 512.

Required: No

SimpleUser

The user name used to identify the client on the host operating system.

> **Note**
>
> If `SIMPLE` is specified for `AuthenticationType`, this parameter is required.

Type: String

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

Pattern: `^[_.A-Za-z0-9][-_.A-Za-z0-9]*$`

Required: No

Subdirectory

A subdirectory in the HDFS cluster. This subdirectory is used to read data from or write data to the HDFS cluster. If the subdirectory isn't specified, it will default to `/`.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: No

Tags

The key-value pair that represents the tag that you want to add to the location. The value can be an empty string. We recommend using tags to name your resources.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the source HDFS cluster location that you create.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationNfs

Creates a transfer *location* for a Network File System (NFS) file server. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses NFS file servers.

Request Syntax

```
{
   "MountOptions": {
      "Version": "string"
   },
   "OnPremConfig": {
      "AgentArns": [ "string" ]
   },
   "ServerHostname": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

MountOptions

Specifies the options that DataSync can use to mount your NFS file server.

Type: NfsMountOptions object

Required: No

OnPremConfig

Specifies the Amazon Resource Name (ARN) of the DataSync agent that can connect to your NFS file server.

You can specify more than one agent. For more information, see Using multiple DataSync agents.

Type: OnPremConfig object

Required: Yes

ServerHostname

Specifies the DNS name or IP address (IPv4 or IPv6) of the NFS file server that your DataSync agent connects to.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: Yes

Subdirectory

Specifies the export path in your NFS file server that you want DataSync to mount.

This path (or a subdirectory of the path) is where DataSync transfers data to or from. For information on configuring an export for DataSync, see Accessing NFS file servers.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]+$`

Required: Yes

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the transfer location that you created for your NFS file server.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Example

The following example creates a DataSync transfer location for an NFS file server.

Sample Request

```
{
  "MountOptions": {
     "Version": : "NFS4_0"
     },
  "OnPremConfig": {
    "AgentArn": [ "arn:aws:datasync:us-east-2:111222333444:agent/
agent-0b0addbeef44b3nfs" ]
          },

           "ServerHostname": "MyServer@amazon.com",
           "Subdirectory": "/MyFolder",
           "Tags": [
              {
                "Key": "Name",
                "Value": "FileSystem-1"
              }
           ]
}
```

Example

The response returns the ARN of the NFS location.

Sample Response

```
{
  "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-07db7abfc326c50aa"
}
```

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

CreateLocationObjectStorage

Creates a transfer *location* for an object storage system. AWS DataSync can use this location as a source or destination for transferring data. You can make transfers with or without a DataSync agent.

Before you begin, make sure that you understand the prerequisites for DataSync to work with object storage systems.

Request Syntax

```
{
   "AccessKey": "string",
   "AgentArns": [ "string" ],
   "BucketName": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "SecretKey": "string",
   "ServerCertificate": blob,
   "ServerHostname": "string",
   "ServerPort": number,
   "ServerProtocol": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessKey

Specifies the access key (for example, a user name) if credentials are required to authenticate with the object storage server.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `^.*$`

Required: No

AgentArns

(Optional) Specifies the Amazon Resource Names (ARNs) of the DataSync agents that can connect with your object storage system. If you are setting up an agentless cross-cloud transfer, you do not need to specify a value for this parameter.

> **Note**
>
> Make sure you configure this parameter correctly when you first create your storage location. You cannot add or remove agents from a storage location after you create it.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

BucketName

Specifies the name of the object storage bucket involved in the transfer.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: `^[a-zA-Z0-9_\-\+\.\(\)\$\p{Zs}]+$`

Required: Yes

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, which includes the `SecretKey` that DataSync uses to access a specific object storage location, with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationObjectStorage` request, you provide only the KMS key ARN. DataSync uses this KMS key together with the value you specify for the `SecretKey` parameter to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with `SecretKey`) or `CustomSecretConfig` (without `SecretKey`) to provide credentials for a `CreateLocationObjectStorage` request. Do not provide both parameters for the same request.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the secret key for a specific object storage location is stored in plain text, in Secrets Manager. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `SecretKey`) or `CustomSecretConfig` (without `SecretKey`) to provide credentials for a `CreateLocationObjectStorage` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

SecretKey

Specifies the secret key (for example, a password) if credentials are required to authenticate with the object storage server.

> **Note**
>
> If you provide a secret using `SecretKey`, but do not provide secret configuration details using `CmkSecretConfig` or `CustomSecretConfig`, then DataSync stores the token using your AWS account's Secrets Manager secret.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `^.*$`

Required: No

ServerCertificate

Specifies a certificate chain for DataSync to authenticate with your object storage system if the system uses a private or self-signed certificate authority (CA). You must specify a single `.pem` file with a full certificate chain (for example, `file:///home/user/.ssh/object_storage_certificates.pem`).

The certificate chain might include:

- The object storage system's certificate
- All intermediate certificates (if there are any)
- The root certificate of the signing CA

You can concatenate your certificates into a `.pem` file (which can be up to 32768 bytes before base64 encoding). The following example `cat` command creates an `object_storage_certificates.pem` file that includes three certificates:

```
cat object_server_certificate.pem intermediate_certificate.pem
ca_root_certificate.pem > object_storage_certificates.pem
```

To use this parameter, configure `ServerProtocol` to `HTTPS`.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 32768.

Required: No

ServerHostname

Specifies the domain name or IP address (IPv4 or IPv6) of the object storage server that your DataSync agent connects to.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: Yes

ServerPort

Specifies the port that your object storage server accepts inbound network traffic on (for example, port 443).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65536.

Required: No

ServerProtocol

Specifies the protocol that your object storage server uses to communicate. If not specified, the default value is `HTTPS`.

Type: String

Valid Values: `HTTPS | HTTP`

Required: No

Subdirectory

Specifies the object prefix for your object storage server. If this is a source location, DataSync only copies objects with this prefix. If this is a destination location, DataSync writes all objects with this prefix.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

Required: No

Tags

Specifies the key-value pair that represents a tag that you want to add to the resource. Tags can help you manage, filter, and search for your resources. We recommend creating a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

Specifies the ARN of the object storage system location that you create.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationS3

Creates a transfer *location* for an Amazon S3 bucket. AWS DataSync can use this location as a source or destination for transferring data.

> **Important**
>
> Before you begin, make sure that you read the following topics:
>
> - Storage class considerations with Amazon S3 locations
> - Evaluating S3 request costs when using DataSync

For more information, see Configuring transfers with Amazon S3.

Request Syntax

```
{
   "AgentArns": [ "string" ],
   "S3BucketArn": "string",
   "S3Config": {
      "BucketAccessRoleArn": "string"
   },
   "S3StorageClass": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArns

(Amazon S3 on Outposts only) Specifies the Amazon Resource Name (ARN) of the DataSync agent on your Outpost.

For more information, see Deploy your DataSync agent on AWS Outposts.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

S3BucketArn

Specifies the ARN of the S3 bucket that you want to use as a location. (When creating your DataSync task later, you specify whether this location is a transfer source or destination.)

If your S3 bucket is located on an AWS Outposts resource, you must specify an Amazon S3 access point. For more information, see Managing data access with Amazon S3 access points in the *Amazon S3 User Guide*.

Type: String

Length Constraints: Maximum length of 268.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:[a-z\-0-9]*:[0-9]{12}:accesspoint[/:][a-zA-Z0-9\-.]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3-outposts:[a-z\-0-9]+:[0-9]{12}:outpost[/:][a-zA-Z0-9\-]{1,63}[/:]accesspoint[/:][a-zA-Z0-9\-]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:::[a-zA-Z0-9.\-_]{1,255}$`

Required: Yes

S3Config

Specifies the Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that DataSync uses to access your S3 bucket.

For more information, see Providing DataSync access to S3 buckets.

Type: S3Config object

Required: Yes

S3StorageClass

Specifies the storage class that you want your objects to use when Amazon S3 is a transfer destination.

For buckets in AWS Regions, the storage class defaults to STANDARD. For buckets on AWS Outposts, the storage class defaults to OUTPOSTS.

For more information, see Storage class considerations with Amazon S3 transfers.

Type: String

Valid Values: `STANDARD | STANDARD_IA | ONEZONE_IA | INTELLIGENT_TIERING | GLACIER | DEEP_ARCHIVE | OUTPOSTS | GLACIER_INSTANT_RETRIEVAL`

Required: No

Subdirectory

Specifies a prefix in the S3 bucket that DataSync reads from or writes to (depending on whether the bucket is a source or destination location).

> **Note**
>
> DataSync can't transfer objects with a prefix that begins with a slash (/) or includes //, /./, or /../ patterns. For example:
>
> - `/photos`
> - `photos//2006/January`
> - `photos/./2006/February`
> - `photos/../2006/March`

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

Required: No

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your transfer location.

Type: Array of TagListEntry objects

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

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the S3 location that you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

CreateLocationSmb

Creates a transfer *location* for a Server Message Block (SMB) file server. AWS DataSync can use this location as a source or destination for transferring data.

Before you begin, make sure that you understand how DataSync accesses SMB file servers. For more information, see Providing DataSync access to SMB file servers.

Request Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "DnsIpAddresses": [ "string" ],
   "Domain": "string",
   "KerberosKeytab": blob,
   "KerberosKrb5Conf": blob,
   "KerberosPrincipal": "string",
   "MountOptions": {
      "Version": "string"
   },
   "Password": "string",
   "ServerHostname": "string",
   "Subdirectory": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "User": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArns

Specifies the DataSync agent (or agents) that can connect to your SMB file server. You specify an agent by using its Amazon Resource Name (ARN).

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: Yes

AuthenticationType

Specifies the authentication protocol that DataSync uses to connect to your SMB file server. DataSync supports `NTLM` (default) and `KERBEROS` authentication.

For more information, see Providing DataSync access to SMB file servers.

Type: String

Valid Values: `NTLM | KERBEROS`

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, either a `Password` or `KerberosKeytab` (for `NTLM` (default) and `KERBEROS` authentication types, respectively) that DataSync uses to access a specific SMB storage location, with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationSmbRequest` request, you provide only the KMS key ARN. DataSync uses this KMS key together with either the `Password`

or `KerberosKeytab` you specify to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with either `Password` or `KerberosKeytab`) or `CustomSecretConfig` (without any `Password` and `KerberosKeytab`) to provide credentials for a `CreateLocationSmbRequest` request. Do not provide both `CmkSecretConfig` and `CustomSecretConfig` parameters for the same request.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the SMB storage location credentials is stored in Secrets Manager as plain text (for `Password`) or binary (for `KerberosKeytab`). This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `SasConfiguration`) or `CustomSecretConfig` (without `SasConfiguration`) to provide credentials for a `CreateLocationSmbRequest` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

DnsIpAddresses

Specifies the IPv4 or IPv6 addresses for the DNS servers that your SMB file server belongs to. This parameter applies only if `AuthenticationType` is set to `KERBEROS`.

If you have multiple domains in your environment, configuring this parameter makes sure that DataSync connects to the right SMB file server.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 7. Maximum length of 39.

Pattern: `\A((25[0-5]|2[0-4]\d|[0-1]?\d?\d)(\.(25[0-5]|2[0-4]\d|[0-1]?\d?\d)){3}|([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}))\z`

Required: No

Domain

Specifies the Windows domain name that your SMB file server belongs to. This parameter applies only if `AuthenticationType` is set to `NTLM`.

If you have multiple domains in your environment, configuring this parameter makes sure that DataSync connects to the right file server.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

Required: No

KerberosKeytab

Specifies your Kerberos key table (keytab) file, which includes mappings between your Kerberos principal and encryption keys.

To avoid task execution errors, make sure that the Kerberos principal that you use to create the keytab file matches exactly what you specify for `KerberosPrincipal`.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 65536.

Required: No

KerberosKrb5Conf

Specifies a Kerberos configuration file (`krb5.conf`) that defines your Kerberos realm configuration.

The file must be base64 encoded. If you're using the AWS CLI, the encoding is done for you.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 131072.

Required: No

KerberosPrincipal

Specifies a Kerberos principal, which is an identity in your Kerberos realm that has permission to access the files, folders, and file metadata in your SMB file server.

A Kerberos principal might look like `HOST/kerberosuser@MYDOMAIN.ORG`.

Principal names are case sensitive. Your DataSync task execution will fail if the principal that you specify for this parameter doesn't exactly match the principal that you use to create the keytab file.

Type: String

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

Pattern: `^.+$`

Required: No

MountOptions

Specifies the version of the SMB protocol that DataSync uses to access your SMB file server.

Type: SmbMountOptions object

Required: No

Password

Specifies the password of the user who can mount your SMB file server and has permission to access the files and folders involved in your transfer. This parameter applies only if `AuthenticationType` is set to `NTLM`.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

ServerHostname

Specifies the domain name or IP address (IPv4 or IPv6) of the SMB file server that your DataSync agent connects to.

> **Note**
>
> If you're using Kerberos authentication, you must specify a domain name.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: Yes

Subdirectory

Specifies the name of the share exported by your SMB file server where DataSync will read or write data. You can include a subdirectory in the share path (for example, `/path/to/subdirectory`). Make sure that other SMB clients in your network can also mount this path.

To copy all data in the subdirectory, DataSync must be able to mount the SMB share and access all of its data. For more information, see Providing DataSync access to SMB file servers.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: Yes

Tags

Specifies labels that help you categorize, filter, and search for your AWS resources. We recommend creating at least a name tag for your location.

Type: Array of TagListEntry objects

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

Required: No

User

Specifies the user that can mount and access the files, folders, and file metadata in your SMB file server. This parameter applies only if `AuthenticationType` is set to `NTLM`.

For information about choosing a user with the right level of access for your transfer, see Providing DataSync access to SMB file servers.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Required: No

Response Syntax

```
{
   "LocationArn": "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.

LocationArn

The ARN of the SMB location that you created.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example creates a location for an SMB file server.

```
{
   "AgentArns":[
      "arn:aws:datasync:us-east-2:111222333444:agent/agent-0b0addbeef44b3nfs",
      "arn:aws:datasync:us-east-2:111222333444:agent/agent-2345noo35nnee1123ovo3"
   ],
   "Domain":"AMAZON",
   "MountOptions":{
```

```
      "Version":"SMB3"
   },
   "Password":"string",
   "ServerHostname":"MyServer.amazon.com",
   "Subdirectory":"share",
   "Tags":[
      {
         "Key":"department",
         "Value":"finance"
      }
   ],
   "User":"user-1"
}
```

Sample Response

A response returns the location ARN of your SMB file server.

```
{
    "LocationArn": "arn:aws:datasync:us-east-1:111222333444:location/
loc-0f01451b140b2af49"
}
```

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

CreateTask

Configures a *task*, which defines where and how AWS DataSync transfers your data.

A task includes a source location, destination location, and transfer options (such as bandwidth limits, scheduling, and more).

> **Important**
>
> If you're planning to transfer data to or from an Amazon S3 location, review how DataSync can affect your S3 request charges and the DataSync pricing page before you begin.

Request Syntax

```
{
   "CloudWatchLogGroupArn": "string",
   "DestinationLocationArn": "string",
   "Excludes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "Includes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "ManifestConfig": {
      "Action": "string",
      "Format": "string",
      "Source": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "ManifestObjectPath": "string",
            "ManifestObjectVersionId": "string",
            "S3BucketArn": "string"
         }
      }
   },
```

```
   "Name": "string",
   "Options": {
      "Atime": "string",
      "BytesPerSecond": number,
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "Schedule": {
      "ScheduleExpression": "string",
      "Status": "string"
   },
   "SourceLocationArn": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TaskMode": "string",
   "TaskReportConfig": {
      "Destination": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "S3BucketArn": "string",
            "Subdirectory": "string"
         }
      },
      "ObjectVersionIds": "string",
      "OutputType": "string",
      "Overrides": {
         "Deleted": {
            "ReportLevel": "string"
```

```
         },
         "Skipped": {
            "ReportLevel": "string"
         },
         "Transferred": {
            "ReportLevel": "string"
         },
         "Verified": {
            "ReportLevel": "string"
         }
      },
      "ReportLevel": "string"
   }
}
```

Request Parameters

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

The request accepts the following data in JSON format.

CloudWatchLogGroupArn

Specifies the Amazon Resource Name (ARN) of an Amazon CloudWatch log group for monitoring your task.

For Enhanced mode tasks, you don't need to specify anything. DataSync automatically sends logs to a CloudWatch log group named `/aws/datasync`.

For more information, see Monitoring data transfers with CloudWatch Logs.

Type: String

Length Constraints: Maximum length of 562.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):logs:[a-z\-0-9]+:[0-9]{12}:log-group:([^:\*]*)(:\*)?$`

Required: No

DestinationLocationArn

Specifies the ARN of your transfer's destination location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Excludes

Specifies exclude filters that define the files, objects, and folders in your source location that you don't want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

Includes

Specifies include filters that define the files, objects, and folders in your source location that you want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

ManifestConfig

Configures a manifest, which is a list of files or objects that you want DataSync to transfer. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

When using this parameter, your caller identity (the role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

Type: ManifestConfig object

Required: No

Name

Specifies the name of your task.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Required: No

Options

Specifies your task's settings, such as preserving file metadata, verifying data integrity, among other options.

Type: Options object

Required: No

Schedule

Specifies a schedule for when you want your task to run. For more information, see Scheduling your task.

Type: TaskSchedule object

Required: No

SourceLocationArn

Specifies the ARN of your transfer's source location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Tags

Specifies the tags that you want to apply to your task.

Tags are key-value pairs that help you manage, filter, and search for your DataSync resources.

Type: Array of TagListEntry objects

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

Required: No

TaskMode

Specifies one of the following task modes for your data transfer:

- ENHANCED - Transfer virtually unlimited numbers of objects with higher performance than Basic mode. Enhanced mode tasks optimize the data transfer process by listing, preparing, transferring, and verifying data in parallel. Enhanced mode is currently available for transfers between Amazon S3 locations, transfers between Azure Blob and Amazon S3 without an agent, and transfers between other clouds and Amazon S3 without an agent.

  > **Note**
  >
  > To create an Enhanced mode task, the IAM role that you use to call the `CreateTask` operation must have the `iam:CreateServiceLinkedRole` permission.

- BASIC (default) - Transfer files or objects between AWS storage and all other supported DataSync locations. Basic mode tasks are subject to quotas on the number of files, objects, and directories in a dataset. Basic mode sequentially prepares, transfers, and verifies data, making it slower than Enhanced mode for most workloads.

For more information, see Understanding task mode differences.

Type: String

Valid Values: `BASIC | ENHANCED`

Required: No

TaskReportConfig

Specifies how you want to configure a task report, which provides detailed information about your DataSync transfer. For more information, see Monitoring your DataSync transfers with task reports.

When using this parameter, your caller identity (the role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

Type: TaskReportConfig object

Required: No

Response Syntax

```
{
   "TaskArn": "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.

TaskArn

The Amazon Resource Name (ARN) of the task.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request for an Enhanced mode task

The following example creates a DataSync task that uses Enhanced mode.

Unlike when creating Basic mode tasks, you don't have to specify an Amazon CloudWatch log group. With Enhanced mode tasks, DataSync automatically sends task logs to a log group named `/aws/datasync`. If that log group doesn't exist in your AWS Region, DataSync creates the log group on your behalf when you create the task.

```
{
  "SourceLocationArn": "arn:aws:datasync:us-
east-1:111222333444:location/1111aaaa2222bbbb3",
  "DestinationLocationArn": "arn:aws:datasync:us-
east-1:111222333444:location/0000zzzz1111yyyy2",
  "Name": "My Enhanced mode task",
  "TaskMode": "ENHANCED",
  "Options": {
    "TransferMode": "CHANGED",
    "VerifyMode": "ONLY_FILES_TRANSFERRED",
    "ObjectTags": "PRESERVE",
    "LogLevel": "TRANSFER"
  }
}
```

Sample Request for a Basic mode task

The following example creates a DataSync task that uses Basic mode.

```
{
    "SourceLocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-1111aaaa2222bbbb3",
    "DestinationLocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-0000zzzz1111yyyy2",
    "Name": "My Basic mode task",
    "TaskMode": "BASIC",
    "Options": {
        "Atime": "BEST_EFFORT",
```

```
        "Gid": "NONE",
        "Mtime": "PRESERVE",
        "PosixPermissions": "PRESERVE",
        "PreserveDevices": "NONE",
        "PreserveDeletedFiles": "PRESERVE",
        "Uid": "NONE",
        "VerifyMode": "ONLY_FILES_TRANSFERRED"
    },
    "Schedule": {
        "ScheduleExpression": "0 12 ? * SUN,WED *"
    },
    "CloudWatchLogGroupArn": "arn:aws:logs:us-east-2:111222333444:log-group:/log-group-
name:*",
    "Tags": [
        {
            "Key": "Name",
            "Value": "Migration-wave-1"
        }
    ]
}
```

Sample Response

The following response includes the ARN of a created task.

```
{
  "TaskArn": "arn:aws:datasync:us-east-2:111222333444:task/task-08de6e6697796f026"
}
```

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

DeleteAgent

Removes an AWS DataSync agent resource from your AWS account.

Keep in mind that this operation (which can't be undone) doesn't remove the agent's virtual machine (VM) or Amazon EC2 instance from your storage environment. For next steps, you can delete the VM or instance from your storage environment or reuse it to activate a new agent.

Request Syntax

```
{
   "AgentArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArn

The Amazon Resource Name (ARN) of the agent to delete. Use the `ListAgents` operation to return a list of agents for your account and AWS Region.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DeleteLocation

Deletes a transfer location resource from AWS DataSync.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

The Amazon Resource Name (ARN) of the location to delete.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DeleteTask

Deletes a transfer task resource from AWS DataSync.

Request Syntax

```
{
   "TaskArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

TaskArn

Specifies the Amazon Resource Name (ARN) of the task that you want to delete.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeAgent

Returns information about an AWS DataSync agent, such as its name, service endpoint type, and status.

Request Syntax

```
{
   "AgentArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArn

Specifies the Amazon Resource Name (ARN) of the DataSync agent that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AgentArn": "string",
   "CreationTime": number,
   "EndpointType": "string",
   "LastConnectionTime": number,
   "Name": "string",
   "Platform": {
```

```
      "Version": "string"
   },
   "PrivateLinkConfig": {
      "PrivateLinkEndpoint": "string",
      "SecurityGroupArns": [ "string" ],
      "SubnetArns": [ "string" ],
      "VpcEndpointId": "string"
   },
   "Status": "string"
}
```

Response Elements

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

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

AgentArn

The ARN of the agent.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

CreationTime

The time that the agent was activated.

Type: Timestamp

EndpointType

The type of service endpoint that your agent is connected to.

Type: String

Valid Values: `PUBLIC | PRIVATE_LINK | FIPS | FIPS_PRIVATE_LINK`

LastConnectionTime

The last time that the agent was communicating with the DataSync service.

Type: Timestamp

Name

The name of the agent.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Platform

The platform-related details about the agent, such as the version number.

Type: Platform object

PrivateLinkConfig

The network configuration that the agent uses when connecting to a VPC service endpoint.

Type: PrivateLinkConfig object

Status

The status of the agent.

- If the status is `ONLINE`, the agent is configured properly and ready to use.
- If the status is `OFFLINE`, the agent has been out of contact with DataSync for five minutes or longer. This can happen for a few reasons. For more information, see What do I do if my agent is offline?

Type: String

Valid Values: `ONLINE | OFFLINE`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example returns information about an agent specified in a request.

```
{
  "AgentArn": "arn:aws:datasync:us-east-2:111122223333:agent/agent-1234567890abcdef0"
}
```

Sample Response

The following example response describes an agent that uses a public service endpoint.

```
{
    "AgentArn": "arn:aws:datasync:us-east-2:111122223333:agent/
agent-1234567890abcdef0",
    "Name": "Data center migration agent",
    "Status": "ONLINE",
    "LastConnectionTime": "2022-10-17T17:21:35.540000+00:00",
    "CreationTime": "2022-10-05T20:52:29.499000+00:00",
    "EndpointType": "PUBLIC",
    "Platform": {
        "Version": "2"
    }
}
```

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

DescribeLocationAzureBlob

Provides details about how an AWS DataSync transfer location for Microsoft Azure Blob Storage is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of your Azure Blob Storage transfer location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AccessTier": "string",
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlobType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
```

```
   "CreationTime": number,
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "LocationArn": "string",
   "LocationUri": "string",
   "ManagedSecretConfig": {
      "SecretArn": "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.

AccessTier

The access tier that you want your objects or files transferred into. This only applies when using the location as a transfer destination. For more information, see Access tiers.

Type: String

Valid Values: `HOT | COOL | ARCHIVE`

AgentArns

The ARNs of the DataSync agents that can connect with your Azure Blob Storage container.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

AuthenticationType

The authentication method DataSync uses to access your Azure Blob Storage. DataSync can access blob storage using a shared access signature (SAS).

Type: String

Valid Values: `SAS | NONE`

BlobType

The type of blob that you want your objects or files to be when transferring them into Azure Blob Storage. Currently, DataSync only supports moving data into Azure Blob Storage as block blobs. For more information on blob types, see the Azure Blob Storage documentation.

Type: String

Valid Values: `BLOCK`

CmkSecretConfig

Describes configuration information for a DataSync-managed secret, such as an authentication token that DataSync uses to access a specific storage location, with a customer-managed AWS KMS key.

Type: CmkSecretConfig object

CreationTime

The time that your Azure Blob Storage transfer location was created.

Type: Timestamp

CustomSecretConfig

Describes configuration information for a customer-managed secret, such as an authentication token that DataSync uses to access a specific storage location, with a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

LocationArn

The ARN of your Azure Blob Storage transfer location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URL of the Azure Blob Storage container involved in your transfer.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as an authentication token that DataSync uses to access a specific storage location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Type: ManagedSecretConfig object

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationEfs

Provides details about how an AWS DataSync transfer location for an Amazon EFS file system is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

The Amazon Resource Name (ARN) of the Amazon EFS file system location that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AccessPointArn": "string",
   "CreationTime": number,
   "Ec2Config": {
      "SecurityGroupArns": [ "string" ],
      "SubnetArn": "string"
   },
```

```
   "FileSystemAccessRoleArn": "string",
   "InTransitEncryption": "string",
   "LocationArn": "string",
   "LocationUri": "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.

AccessPointArn

The ARN of the access point that DataSync uses to access the Amazon EFS file system.

For more information, see Accessing restricted file systems.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):elasticfilesystem:[a-z\-0-9]+:[0-9]{12}:access-point/fsap-[0-9a-f]{8,40}$`

CreationTime

The time that the location was created.

Type: Timestamp

Ec2Config

The subnet and security groups that AWS DataSync uses to connect to one of your Amazon EFS file system's mount targets.

Type: Ec2Config object

FileSystemAccessRoleArn

The AWS Identity and Access Management (IAM) role that allows DataSync to access your Amazon EFS file system.

For more information, see Creating a DataSync IAM role for file system access.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$`

InTransitEncryption

Indicates whether DataSync uses Transport Layer Security (TLS) encryption when transferring data to or from the Amazon EFS file system.

Type: String

Valid Values: `NONE | TLS1_2`

LocationArn

The ARN of the Amazon EFS file system location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URL of the Amazon EFS file system location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example shows how to get information about a specific Amazon EFS file system location.

```
{
  "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-12abcdef012345678"
}
```

Sample Response

The following example returns location details about an Amazon EFS file system.

```
{
    "CreationTime": 1653319021.353,
    "Ec2Config": {
        "SubnetArn": "arn:aws:ec2:us-east-2:111222333444:subnet/
subnet-1234567890abcdef1",
        "SecurityGroupArns": [
            "arn:aws:ec2:us-east-2:111222333444:security-group/sg-1234567890abcdef2"
        ]
    },
    "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/loc-
abcdef01234567890",
    "LocationUri": "efs://us-east-2.fs-021345abcdef6789/"
}
```

Sample Response: Describing a location for a restricted Amazon EFS file system

The following example returns location details about an Amazon EFS file system with restricted access, including the `AccessPointArn`, `FileSystemAccessRoleArn`, and `InTransitEncryption` elements.

```
{
    "CreationTime": 1653319021.353,
    "AccessPointArn": "arn:aws:elasticfilesystem:us-east-2:111222333444:access-point/
fsap-1234567890abcdef0",
    "Ec2Config": {
        "SubnetArn": "arn:aws:ec2:us-east-2:111222333444:subnet/
subnet-1234567890abcdef1",
        "SecurityGroupArns": [
            "arn:aws:ec2:us-east-2:111222333444:security-group/sg-1234567890abcdef2"
        ]
    },
    "FileSystemAccessRoleArn": "arn:aws:iam::111222333444:role/
AwsDataSyncFullAccessNew",
    "InTransitEncryption": "TLS1_2",
    "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/loc-
abcdef01234567890",
    "LocationUri": "efs://us-east-2.fs-021345abcdef6789/",
    "Subdirectory": "/mount/path",
    "Tags": [{
        "Key": "Name",
        "Value": "ElasticFileSystem-1"
    }]
}
```

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

DescribeLocationFsxLustre

Provides details about how an AWS DataSync transfer location for an Amazon FSx for Lustre file system is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

The Amazon Resource Name (ARN) of the FSx for Lustre location to describe.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "CreationTime": number,
   "LocationArn": "string",
   "LocationUri": "string",
   "SecurityGroupArns": [ "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.

CreationTime

The time that the FSx for Lustre location was created.

Type: Timestamp

LocationArn

The Amazon Resource Name (ARN) of the FSx for Lustre location that was described.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URI of the FSx for Lustre location that was described.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

SecurityGroupArns

The Amazon Resource Names (ARNs) of the security groups that are configured for the FSx for Lustre file system.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationFsxOntap

Provides details about how an AWS DataSync transfer location for an Amazon FSx for NetApp ONTAP file system is configured.

> **Note**
>
> If your location uses SMB, the `DescribeLocationFsxOntap` operation doesn't actually return a `Password`.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the FSx for ONTAP file system location that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
```

```
   "CreationTime": number,
   "FsxFilesystemArn": "string",
   "LocationArn": "string",
   "LocationUri": "string",
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "ManagedSecretConfig": {
            "SecretArn": "string"
         },
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
         "User": "string"
      }
   },
   "SecurityGroupArns": [ "string" ],
   "StorageVirtualMachineArn": "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.

CreationTime

The time that the location was created.

Type: Timestamp

FsxFilesystemArn

The ARN of the FSx for ONTAP file system.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:file-system/fs-[0-9a-f]+$`

LocationArn

The ARN of the FSx for ONTAP file system location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The uniform resource identifier (URI) of the FSx for ONTAP file system location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

Protocol

Specifies the data transfer protocol that AWS DataSync uses to access your Amazon FSx file system.

Type: FsxProtocol object

SecurityGroupArns

The security groups that DataSync uses to access your FSx for ONTAP file system.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

StorageVirtualMachineArn

The ARN of the storage virtual machine (SVM) on your FSx for ONTAP file system where you're copying data to or from.

Type: String

Length Constraints: Maximum length of 162.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):fsx:[a-z\-0-9]+:[0-9]{12}:storage-virtual-machine/fs-[0-9a-f]+/svm-[0-9a-f]{17,}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationFsxOpenZfs

Provides details about how an AWS DataSync transfer location for an Amazon FSx for OpenZFS file system is configured.

> **Note**
>
> Response elements related to SMB aren't supported with the `DescribeLocationFsxOpenZfs` operation.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

The Amazon Resource Name (ARN) of the FSx for OpenZFS location to describe.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
```

```
   "CreationTime": number,
   "LocationArn": "string",
   "LocationUri": "string",
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "ManagedSecretConfig": {
            "SecretArn": "string"
         },
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
         "User": "string"
      }
   },
   "SecurityGroupArns": [ "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.

CreationTime

The time that the FSx for OpenZFS location was created.

Type: Timestamp

LocationArn

The ARN of the FSx for OpenZFS location that was described.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The uniform resource identifier (URI) of the FSx for OpenZFS location that was described.

Example: `fsxz://us-west-2.fs-1234567890abcdef02/fsx/folderA/folder`

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

Protocol

The type of protocol that AWS DataSync uses to access your file system.

Type: FsxProtocol object

SecurityGroupArns

The ARNs of the security groups that are configured for the FSx for OpenZFS file system.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationFsxWindows

Provides details about how an AWS DataSync transfer location for an Amazon FSx for Windows File Server file system is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the FSx for Windows File Server location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CreationTime": number,
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
```

```
      "SecretArn": "string"
   },
   "Domain": "string",
   "LocationArn": "string",
   "LocationUri": "string",
   "ManagedSecretConfig": {
      "SecretArn": "string"
   },
   "SecurityGroupArns": [ "string" ],
   "User": "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.

CmkSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `Password` that DataSync uses to access a specific storage location, with a customer-managed AWS KMS key.

Type: CmkSecretConfig object

CreationTime

The time that the FSx for Windows File Server location was created.

Type: Timestamp

CustomSecretConfig

Describes configuration information for a customer-managed secret, such as a `Password` that DataSync uses to access a specific storage location, with a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Domain

The name of the Microsoft Active Directory domain that the FSx for Windows File Server file system belongs to.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

LocationArn

The ARN of the FSx for Windows File Server location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The uniform resource identifier (URI) of the FSx for Windows File Server location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `Password` that DataSync uses to access a specific storage location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Type: ManagedSecretConfig object

SecurityGroupArns

The ARNs of the Amazon EC2 security groups that provide access to your file system's preferred subnet.

For information about configuring security groups for file system access, see the *Amazon FSx for Windows File Server User Guide*.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

User

The user with the permissions to mount and access the FSx for Windows File Server file system.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationHdfs

Provides details about how an AWS DataSync transfer location for a Hadoop Distributed File System (HDFS) is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the HDFS location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlockSize": number,
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CreationTime": number,
```

```
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "KerberosPrincipal": "string",
   "KmsKeyProviderUri": "string",
   "LocationArn": "string",
   "LocationUri": "string",
   "ManagedSecretConfig": {
      "SecretArn": "string"
   },
   "NameNodes": [
      {
         "Hostname": "string",
         "Port": number
      }
   ],
   "QopConfiguration": {
      "DataTransferProtection": "string",
      "RpcProtection": "string"
   },
   "ReplicationFactor": number,
   "SimpleUser": "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.

AgentArns

The ARNs of the DataSync agents that can connect with your HDFS cluster.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

AuthenticationType

The type of authentication used to determine the identity of the user.

Type: String

Valid Values: `SIMPLE` | `KERBEROS`

BlockSize

The size of the data blocks to write into the HDFS cluster.

Type: Integer

Valid Range: Minimum value of 1048576. Maximum value of 1073741824.

CmkSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `KerberosKeytab` that DataSync uses to access a specific storage location, with a customer-managed AWS KMS key.

Type: CmkSecretConfig object

CreationTime

The time that the HDFS location was created.

Type: Timestamp

CustomSecretConfig

Describes configuration information for a customer-managed secret, such as a `KerberosKeytab` that DataSync uses to access a specific storage location, with a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

KerberosPrincipal

The Kerberos principal with access to the files and folders on the HDFS cluster. This parameter is used if the `AuthenticationType` is defined as `KERBEROS`.

Type: String

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

Pattern: `^.+$`

KmsKeyProviderUri

The URI of the HDFS cluster's Key Management Server (KMS).

Type: String

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

Pattern: `^kms:\/\/http[s]?@(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9])(;(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9]))*:[0-9]{1,5}\/kms$`

LocationArn

The ARN of the HDFS location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URI of the HDFS location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `KerberosKeytab` that DataSync uses to access a specific storage location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Type: ManagedSecretConfig object

NameNodes

The NameNode that manages the HDFS namespace.

Type: Array of HdfsNameNode objects

Array Members: Minimum number of 1 item.

QopConfiguration

The Quality of Protection (QOP) configuration, which specifies the Remote Procedure Call (RPC) and data transfer protection settings configured on the HDFS cluster.

Type: QopConfiguration object

ReplicationFactor

The number of DataNodes to replicate the data to when writing to the HDFS cluster.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 512.

SimpleUser

The user name to identify the client on the host operating system. This parameter is used if the `AuthenticationType` is defined as `SIMPLE`.

Type: String

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

Pattern: `^[_.A-Za-z0-9][-_.A-Za-z0-9]*$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationNfs

Provides details about how an AWS DataSync transfer location for a Network File System (NFS) file server is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the NFS location that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "CreationTime": number,
   "LocationArn": "string",
   "LocationUri": "string",
   "MountOptions": {
      "Version": "string"
```

```
   },
   "OnPremConfig": {
      "AgentArns": [ "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.

CreationTime

The time when the NFS location was created.

Type: Timestamp

LocationArn

The ARN of the NFS location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URI of the NFS location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

MountOptions

The mount options that DataSync uses to mount your NFS file server.

Type: NfsMountOptions object

OnPremConfig

The AWS DataSync agents that can connect to your Network File System (NFS) file server.

Type: OnPremConfig object

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Example

The following example returns information about the NFS location specified in the sample request.

Sample Request

```
{
  "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-07db7abfc326c50aa"
}
```

Example

This example illustrates one usage of DescribeLocationNfs.

Sample Response

```
{
```

```
   "CreationTime": 1532660733.39,
   "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-07db7abfc326c50aa",
   "LocationUri": "hostname.amazon.com",
   "OnPremConfig": {
      "AgentArns": [ "arn:aws:datasync:us-east-2:111222333444:agent/
agent-0b0addbeef44b3nfs" ]
   }
}
```

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

DescribeLocationObjectStorage

Provides details about how an AWS DataSync transfer location for an object storage system is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the object storage system location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AccessKey": "string",
   "AgentArns": [ "string" ],
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CreationTime": number,
```

```
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "LocationArn": "string",
   "LocationUri": "string",
   "ManagedSecretConfig": {
      "SecretArn": "string"
   },
   "ServerCertificate": blob,
   "ServerPort": number,
   "ServerProtocol": "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.

AccessKey

The access key (for example, a user name) required to authenticate with the object storage system.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `^.*$`

AgentArns

The ARNs of the DataSync agents that can connect with your object storage system.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

CmkSecretConfig

Describes configuration information for a DataSync-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

CreationTime

The time that the location was created.

Type: Timestamp

CustomSecretConfig

Describes configuration information for a customer-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

LocationArn

The ARN of the object storage system location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URI of the object storage system location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Type: ManagedSecretConfig object

ServerCertificate

The certificate chain for DataSync to authenticate with your object storage system if the system uses a private or self-signed certificate authority (CA).

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 32768.

ServerPort

The port that your object storage server accepts inbound network traffic on (for example, port 443).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65536.

ServerProtocol

The protocol that your object storage system uses to communicate.

Type: String

Valid Values: `HTTPS | HTTP`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

DescribeLocationS3

Provides details about how an AWS DataSync transfer location for an S3 bucket is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the Amazon S3 location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AgentArns": [ "string" ],
   "CreationTime": number,
   "LocationArn": "string",
   "LocationUri": "string",
   "S3Config": {
      "BucketAccessRoleArn": "string"
   },
   "S3StorageClass": "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.

AgentArns

The ARNs of the DataSync agents deployed on your Outpost when using working with Amazon S3 on Outposts.

For more information, see Deploy your DataSync agent on AWS Outposts.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

CreationTime

The time that the Amazon S3 location was created.

Type: Timestamp

LocationArn

The ARN of the Amazon S3 location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URL of the Amazon S3 location that was described.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

S3Config

Specifies the Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that DataSync uses to access your S3 bucket.

For more information, see Providing DataSync access to S3 buckets.

Type: S3Config object

S3StorageClass

When Amazon S3 is a destination location, this is the storage class that you chose for your objects.

Some storage classes have behaviors that can affect your Amazon S3 storage costs. For more information, see Storage class considerations with Amazon S3 transfers.

Type: String

Valid Values: `STANDARD | STANDARD_IA | ONEZONE_IA | INTELLIGENT_TIERING | GLACIER | DEEP_ARCHIVE | OUTPOSTS | GLACIER_INSTANT_RETRIEVAL`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Example

The following example returns information about the Amazon S3 location specified in the sample request.

Sample Request

```
{
  "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-07db7abfc326c50s3"
}
```

Example

This example illustrates one usage of DescribeLocationS3.

Sample Response

```
{
   "CreationTime": 1532660733.39,
   "LocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-07db7abfc326c50s3",
   "LocationUri": "s3://amzn-s3-demo-bucket",
   "S3Config": {
      "BucketAccessRoleArn": "arn:aws:iam::111222333444:role/amzn-s3-demo-bucket-
access-role",
   }
    "S3StorageClass": "STANDARD"
}
```

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

DescribeLocationSmb

Provides details about how an AWS DataSync transfer location for a Server Message Block (SMB) file server is configured.

Request Syntax

```
{
   "LocationArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the SMB location that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Response Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CreationTime": number,
```

```
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "DnsIpAddresses": [ "string" ],
   "Domain": "string",
   "KerberosPrincipal": "string",
   "LocationArn": "string",
   "LocationUri": "string",
   "ManagedSecretConfig": {
      "SecretArn": "string"
   },
   "MountOptions": {
      "Version": "string"
   },
   "User": "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.

AgentArns

The ARNs of the DataSync agents that can connect with your SMB file server.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

AuthenticationType

The authentication protocol that DataSync uses to connect to your SMB file server.

Type: String

Valid Values: `NTLM` | `KERBEROS`

CmkSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `Password` or `KerberosKeytab` that DataSync uses to access a specific storage location, with a customer-managed AWS KMS key.

Type: CmkSecretConfig object

CreationTime

The time that the SMB location was created.

Type: Timestamp

CustomSecretConfig

Describes configuration information for a customer-managed secret, such as a `Password` or `KerberosKeytab` that DataSync uses to access a specific storage location, with a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

DnsIpAddresses

The IPv4 or IPv6 addresses for the DNS servers that your SMB file server belongs to. This element applies only if `AuthenticationType` is set to `KERBEROS`.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 7. Maximum length of 39.

Pattern: `\A((25[0-5]|2[0-4]\d|[0-1]?\d?\d)(\.(25[0-5]|2[0-4]\d|[0-1]?\d?\d)){3}|([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}))\z`

Domain

The name of the Windows domain that the SMB file server belongs to. This element applies only if `AuthenticationType` is set to `NTLM`.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

KerberosPrincipal

The Kerberos principal that has permission to access the files, folders, and file metadata in your SMB file server.

Type: String

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

Pattern: `^.+$`

LocationArn

The ARN of the SMB location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

LocationUri

The URI of the SMB location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-z0-9-]+)://[a-zA-Z0-9.:/\-]+$`

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `Password` or `KerberosKeytab` that DataSync uses to access a specific storage location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Type: ManagedSecretConfig object

MountOptions

The SMB protocol version that DataSync uses to access your SMB file server.

Type: SmbMountOptions object

User

The user that can mount and access the files, folders, and file metadata in your SMB file server. This element applies only if `AuthenticationType` is set to `NTLM`.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of DescribeLocationSmb.

Sample Request

```
{
```

```
  "arn:aws:datasync:us-east-1:111222333444:location/loc-0f01451b140b2af49"
}
```

Example

This example illustrates one usage of DescribeLocationSmb.

Sample Response

```
{
   "AgentArns":[
      "arn:aws:datasync:us-east-2:111222333444:agent/agent-0bc3b3dc9bbc15145",
      "arn:aws:datasync:us-east-2:111222333444:agent/agent-04b3fe3d261a18c8f"
   ],
   "CreationTime":"1532660733.39",
   "Domain":"AMAZON",
   "LocationArn":"arn:aws:datasync:us-east-1:111222333444:location/
loc-0f01451b140b2af49",
   "LocationUri":"smb://hostname.amazon.com/share",
   "MountOptions":{
      "Version":"SMB3"
   },
   "User":"user-1"
}
```

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

DescribeTask

Provides information about a *task*, which defines where and how AWS DataSync transfers your data.

Request Syntax

```
{
   "TaskArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

TaskArn

Specifies the Amazon Resource Name (ARN) of the transfer task that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: Yes

Response Syntax

```
{
   "CloudWatchLogGroupArn": "string",
   "CreationTime": number,
   "CurrentTaskExecutionArn": "string",
   "DestinationLocationArn": "string",
   "DestinationNetworkInterfaceArns": [ "string" ],
   "ErrorCode": "string",
   "ErrorDetail": "string",
```

```
   "Excludes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "Includes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "ManifestConfig": {
      "Action": "string",
      "Format": "string",
      "Source": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "ManifestObjectPath": "string",
            "ManifestObjectVersionId": "string",
            "S3BucketArn": "string"
         }
      }
   },
   "Name": "string",
   "Options": {
      "Atime": "string",
      "BytesPerSecond": number,
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "Schedule": {
```

```
      "ScheduleExpression": "string",
      "Status": "string"
   },
   "ScheduleDetails": {
      "DisabledBy": "string",
      "DisabledReason": "string",
      "StatusUpdateTime": number
   },
   "SourceLocationArn": "string",
   "SourceNetworkInterfaceArns": [ "string" ],
   "Status": "string",
   "TaskArn": "string",
   "TaskMode": "string",
   "TaskReportConfig": {
      "Destination": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "S3BucketArn": "string",
            "Subdirectory": "string"
         }
      },
      "ObjectVersionIds": "string",
      "OutputType": "string",
      "Overrides": {
         "Deleted": {
            "ReportLevel": "string"
         },
         "Skipped": {
            "ReportLevel": "string"
         },
         "Transferred": {
            "ReportLevel": "string"
         },
         "Verified": {
            "ReportLevel": "string"
         }
      },
      "ReportLevel": "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.

CloudWatchLogGroupArn

The Amazon Resource Name (ARN) of an Amazon CloudWatch log group for monitoring your task.

For more information, see Monitoring data transfers with CloudWatch Logs.

Type: String

Length Constraints: Maximum length of 562.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):logs:[a-z\-0-9]+:[0-9]{12}:log-group:([^:\*]*)(:\*)?$`

CreationTime

The time that the task was created.

Type: Timestamp

CurrentTaskExecutionArn

The ARN of the most recent task execution.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

DestinationLocationArn

The ARN of your transfer's destination location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

DestinationNetworkInterfaceArns

The ARNs of the network interfaces that DataSync created for your destination location.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: `^arn:aws[\-a-z]{0,}:ec2:[a-z\-0-9]*:[0-9]{12}:network-interface/eni-[0-9a-f]+$`

ErrorCode

If there's an issue with your task, you can use the error code to help you troubleshoot the problem. For more information, see Troubleshooting issues with DataSync transfers.

Type: String

ErrorDetail

If there's an issue with your task, you can use the error details to help you troubleshoot the problem. For more information, see Troubleshooting issues with DataSync transfers.

Type: String

Excludes

The exclude filters that define the files, objects, and folders in your source location that you don't want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Includes

The include filters that define the files, objects, and folders in your source location that you want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

ManifestConfig

The configuration of the manifest that lists the files or objects that you want DataSync to transfer. For more information, see Specifying what DataSync transfers by using a manifest.

Type: ManifestConfig object

Name

The name of your task.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Options

The task's settings. For example, what file metadata gets preserved, how data integrity gets verified at the end of your transfer, bandwidth limits, among other options.

Type: Options object

Schedule

The schedule for when you want your task to run. For more information, see Scheduling your task.

Type: TaskSchedule object

ScheduleDetails

The details about your task schedule.

Type: TaskScheduleDetails object

SourceLocationArn

The ARN of your transfer's source location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

SourceNetworkInterfaceArns

The ARNs of the network interfaces that DataSync created for your source location.

Type: Array of strings

Length Constraints: Maximum length of 128.

Pattern: `^arn:aws[\-a-z]{0,}:ec2:[a-z\-0-9]*:[0-9]{12}:network-interface/eni-[0-9a-f]+$`

Status

The status of your task. For information about what each status means, see Task statuses.

Type: String

Valid Values: `AVAILABLE | CREATING | QUEUED | RUNNING | UNAVAILABLE`

TaskArn

The ARN of your task.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

TaskMode

The task mode that you're using. For more information, see Choosing a task mode for your data transfer.

Type: String

Valid Values: `BASIC | ENHANCED`

TaskReportConfig

The configuration of your task report, which provides detailed information about your DataSync transfer. For more information, see Monitoring your DataSync transfers with task reports.

Type: TaskReportConfig object

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example specifies the ARN of a DataSync task to get information about.

```
{
  "TaskArn": "arn:aws:datasync:us-east-2:111222333444:task/task-08de6e6697796f026"
}
```

Sample Response

The following example shows a `DescribeTask` response.

```
{
  "TaskArn": "arn:aws:datasync:us-east-2:111222333444:task/task-08de6e6697796f026",
  "Name": "MyTask",
  "TaskMode": "BASIC",
  "Status": "RUNNING",
  "SourceLocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-1111aaaa2222bbbb3",
  "DestinationLocationArn": "arn:aws:datasync:us-east-2:111222333444:location/
loc-0000zzzz1111yyyy2",
```

```
  "CurrentTaskExecutionArn": "arn:aws:datasync:us-east-2:111222333444:task/
task-08de6e6697796f026/execution/exec-04ce9d516d69bd52f",
  "CreationTime": 1532660733.39,
  "Options": {
    "Atime": "BEST_EFFORT",
    "BytesPerSecond": 1000,
    "Gid": "NONE",
    "Mtime": "PRESERVE",
    "PosixPermissions": "PRESERVE",
    "PreserveDevices": "NONE",
    "PreserveDeletedFiles": "PRESERVE",
    "Uid": "NONE",
    "VerifyMode": "POINT_IN_TIME_CONSISTENT"
  },
  "CloudWatchLogGroupArn": "arn:aws:logs:us-east-2:111222333444:log-group:/log-group-
name:*"
}
```

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

DescribeTaskExecution

Provides information about an execution of your AWS DataSync task. You can use this operation to help monitor the progress of an ongoing data transfer or check the results of the transfer.

> **Note**
>
> Some `DescribeTaskExecution` response elements are only relevant to a specific task mode. For information, see Understanding task mode differences and Understanding data transfer performance counters.

Request Syntax

```
{
   "TaskExecutionArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

TaskExecutionArn

Specifies the Amazon Resource Name (ARN) of the task execution that you want information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

Required: Yes

Response Syntax

```
{
   "BytesCompressed": number,
   "BytesTransferred": number,
   "BytesWritten": number,
   "EndTime": number,
   "EstimatedBytesToTransfer": number,
   "EstimatedFilesToDelete": number,
   "EstimatedFilesToTransfer": number,
   "EstimatedFoldersToDelete": number,
   "EstimatedFoldersToTransfer": number,
   "Excludes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "FilesDeleted": number,
   "FilesFailed": {
      "Delete": number,
      "Prepare": number,
      "Transfer": number,
      "Verify": number
   },
   "FilesListed": {
      "AtDestinationForDelete": number,
      "AtSource": number
   },
   "FilesPrepared": number,
   "FilesSkipped": number,
   "FilesTransferred": number,
   "FilesVerified": number,
   "FoldersDeleted": number,
   "FoldersFailed": {
      "Delete": number,
      "List": number,
      "Prepare": number,
      "Transfer": number,
      "Verify": number
   },
   "FoldersListed": {
      "AtDestinationForDelete": number,
```

```
      "AtSource": number
   },
   "FoldersPrepared": number,
   "FoldersSkipped": number,
   "FoldersTransferred": number,
   "FoldersVerified": number,
   "Includes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "LaunchTime": number,
   "ManifestConfig": {
      "Action": "string",
      "Format": "string",
      "Source": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "ManifestObjectPath": "string",
            "ManifestObjectVersionId": "string",
            "S3BucketArn": "string"
         }
      }
   },
   "Options": {
      "Atime": "string",
      "BytesPerSecond": number,
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "ReportResult": {
```

```
      "ErrorCode": "string",
      "ErrorDetail": "string",
      "Status": "string"
   },
   "Result": {
      "ErrorCode": "string",
      "ErrorDetail": "string",
      "PrepareDuration": number,
      "PrepareStatus": "string",
      "TotalDuration": number,
      "TransferDuration": number,
      "TransferStatus": "string",
      "VerifyDuration": number,
      "VerifyStatus": "string"
   },
   "StartTime": number,
   "Status": "string",
   "TaskExecutionArn": "string",
   "TaskMode": "string",
   "TaskReportConfig": {
      "Destination": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "S3BucketArn": "string",
            "Subdirectory": "string"
         }
      },
      "ObjectVersionIds": "string",
      "OutputType": "string",
      "Overrides": {
         "Deleted": {
            "ReportLevel": "string"
         },
         "Skipped": {
            "ReportLevel": "string"
         },
         "Transferred": {
            "ReportLevel": "string"
         },
         "Verified": {
            "ReportLevel": "string"
         }
      },
      "ReportLevel": "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.

BytesCompressed

The number of physical bytes that DataSync transfers over the network after compression (if compression is possible). This number is typically less than BytesTransferred unless the data isn't compressible.

Type: Long

BytesTransferred

The number of bytes that DataSync sends to the network before compression (if compression is possible). For the number of bytes transferred over the network, see BytesCompressed.

Type: Long

BytesWritten

The number of logical bytes that DataSync actually writes to the destination location.

Type: Long

EndTime

The time that the transfer task ends.

Type: Timestamp

EstimatedBytesToTransfer

The number of logical bytes that DataSync expects to write to the destination location.

Type: Long

EstimatedFilesToDelete

The number of files, objects, and directories that DataSync expects to delete in your destination location. If you don't configure your task to delete data in the destination that isn't in the source, the value is always `0`.

> **Note**
>
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in EstimatedFoldersToDelete.

Type: Long

EstimatedFilesToTransfer

The number of files, objects, and directories that DataSync expects to transfer over the network. This value is calculated while DataSync prepares the transfer.

How this gets calculated depends primarily on your task's transfer mode configuration:

- If `TranserMode` is set to `CHANGED` - The calculation is based on comparing the content of the source and destination locations and determining the difference that needs to be transferred. The difference can include:
  - Anything that's added or modified at the source location.
  - Anything that's in both locations and modified at the destination after an initial transfer (unless OverwriteMode is set to `NEVER`).
  - **(Basic task mode only)** The number of items that DataSync expects to delete (if PreserveDeletedFiles is set to `REMOVE`).
- If `TranserMode` is set to `ALL` - The calculation is based only on the items that DataSync finds at the source location.

> **Note**
>
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in EstimatedFoldersToTransfer.

Type: Long

EstimatedFoldersToDelete

The number of directories that DataSync expects to delete in your destination location. If you don't configure your task to delete data in the destination that isn't in the source, the value is always `0`.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

EstimatedFoldersToTransfer

The number of directories that DataSync expects to transfer over the network. This value is calculated as DataSync prepares directories to transfer.

How this gets calculated depends primarily on your task's transfer mode configuration:

- If `TranserMode` is set to `CHANGED` - The calculation is based on comparing the content of the source and destination locations and determining the difference that needs to be transferred. The difference can include:
  - Anything that's added or modified at the source location.
  - Anything that's in both locations and modified at the destination after an initial transfer (unless OverwriteMode is set to `NEVER`).
- If `TranserMode` is set to `ALL` - The calculation is based only on the items that DataSync finds at the source location.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

Excludes

A list of filter rules that exclude specific data during your transfer. For more information and examples, see Filtering data transferred by DataSync.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

FilesDeleted

The number of files, objects, and directories that DataSync actually deletes in your destination location. If you don't configure your task to delete data in the destination that isn't in the source, the value is always `0`.

> **Note**
>
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in FoldersDeleted.

Type: Long

FilesFailed

The number of files or objects that DataSync fails to prepare, transfer, verify, and delete during your task execution.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: TaskExecutionFilesFailedDetail object

FilesListed

The number of files or objects that DataSync finds at your locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: TaskExecutionFilesListedDetail object

FilesPrepared

The number of files or objects that DataSync will attempt to transfer after comparing your source and destination locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

This counter isn't applicable if you configure your task to transfer all data. In that scenario, DataSync copies everything from the source to the destination without comparing differences between the locations.

Type: Long

FilesSkipped

The number of files, objects, and directories that DataSync skips during your transfer.

> **Note**
>
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in FoldersSkipped.

Type: Long

FilesTransferred

The number of files, objects, and directories that DataSync actually transfers over the network. This value is updated periodically during your task execution when something is read from the source and sent over the network.

If DataSync fails to transfer something, this value can be less than `EstimatedFilesToTransfer`. In some cases, this value can also be greater than `EstimatedFilesToTransfer`. This element is implementation-specific for some location types, so don't use it as an exact indication of what's transferring or to monitor your task execution.

> **Note**
>
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in FoldersTransferred.

Type: Long

FilesVerified

The number of files, objects, and directories that DataSync verifies during your transfer.

> **Note**
>
> When you configure your task to verify only the data that's transferred, DataSync doesn't verify directories in some situations or files that fail to transfer.
> For Enhanced mode tasks, this counter only includes files or objects. Directories are counted in FoldersVerified.

Type: Long

FoldersDeleted

The number of directories that DataSync actually deletes in your destination location. If you don't configure your task to delete data in the destination that isn't in the source, the value is always `0`.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

FoldersFailed

The number of directories that DataSync fails to list, prepare, transfer, verify, and delete during your task execution.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: TaskExecutionFoldersFailedDetail object

FoldersListed

The number of directories that DataSync finds at your locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: TaskExecutionFoldersListedDetail object

FoldersPrepared

The number of directories that DataSync will attempt to transfer after comparing your source and destination locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

This counter isn't applicable if you configure your task to transfer all data. In that scenario, DataSync copies everything from the source to the destination without comparing differences between the locations.

Type: Long

FoldersSkipped

The number of directories that DataSync skips during your transfer.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

FoldersTransferred

The number of directories that DataSync actually transfers over the network. This value is updated periodically during your task execution when something is read from the source and sent over the network.

If DataSync fails to transfer something, this value can be less than `EstimatedFoldersToTransfer`. In some cases, this value can also be greater than `EstimatedFoldersToTransfer`.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

FoldersVerified

The number of directories that DataSync verifies during your transfer.

> **Note**
>
> Applies only to Enhanced mode tasks.

Type: Long

Includes

A list of filter rules that include specific data during your transfer. For more information and examples, see Filtering data transferred by DataSync.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

LaunchTime

The time that the task execution actually begins. For non-queued tasks, `LaunchTime` and `StartTime` are typically the same. For queued tasks, `LaunchTime` is typically later than `StartTime` because previously queued tasks must finish running before newer tasks can begin.

Type: Timestamp

ManifestConfig

The configuration of the manifest that lists the files or objects to transfer. For more information, see Specifying what DataSync transfers by using a manifest.

Type: ManifestConfig object

Options

Indicates how your transfer task is configured. These options include how DataSync handles files, objects, and their associated metadata during your transfer. You also can specify how to verify data integrity, set bandwidth limits for your task, among other options.

Each option has a default value. Unless you need to, you don't have to configure any option before calling StartTaskExecution.

You also can override your task options for each task execution. For example, you might want to adjust the `LogLevel` for an individual execution.

Type: Options object

ReportResult

Indicates whether DataSync generated a complete task report for your transfer.

Type: ReportResult object

Result

The result of the task execution.

Type: TaskExecutionResultDetail object

StartTime

The time that DataSync sends the request to start the task execution. For non-queued tasks, `LaunchTime` and `StartTime` are typically the same. For queued tasks, `LaunchTime` is typically later than `StartTime` because previously queued tasks must finish running before newer tasks can begin.

Type: Timestamp

Status

The status of the task execution.

For detailed information about task execution statuses, see Task execution statuses.

Type: String

Valid Values: `QUEUED | CANCELLING | LAUNCHING | PREPARING | TRANSFERRING | VERIFYING | SUCCESS | ERROR`

TaskExecutionArn

The ARN of the task execution that you wanted information about. `TaskExecutionArn` is hierarchical and includes `TaskArn` for the task that was executed.

For example, a `TaskExecution` value with the ARN `arn:aws:datasync:us-east-1:111222333444:task/task-0208075f79cedf4a2/execution/exec-08ef1e88ec491019b` executed the task with the ARN `arn:aws:datasync:us-east-1:111222333444:task/task-0208075f79cedf4a2`.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

TaskMode

The task mode that you're using. For more information, see Choosing a task mode for your data transfer.

Type: String

Valid Values: `BASIC | ENHANCED`

TaskReportConfig

The configuration of your task report, which provides detailed information about for your DataSync transfer. For more information, see Creating a task report.

Type: TaskReportConfig object

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

This example illustrates a `DescribeTaskExecution` request.

```
{
    "TaskExecutionArn": "arn:aws:datasync:us-east-1:111222333444:task/task-
aaaabbbbccccddddf/execution/exec-1234abcd1234abcd1"
}
```

Sample Response 1 for an Enhanced mode task execution

The following example describes a DataSync task execution that uses Enhanced mode. The execution is also transferring specific data by using exclude and include filters.

```
{
    "TaskExecutionArn": "arn:aws:datasync:us-east-1:111222333444:task/task-
aaaabbbbccccddddf/execution/exec-1234abcd1234abcd1",
    "Status": "SUCCESS",
    "Options": {
        "VerifyMode": "ONLY_FILES_TRANSFERRED",
        "OverwriteMode": "ALWAYS",
        "Atime": "BEST_EFFORT",
        "Mtime": "PRESERVE",
        "Uid": "NONE",
        "Gid": "NONE",
        "PreserveDeletedFiles": "PRESERVE",
        "PreserveDevices": "NONE",
        "PosixPermissions": "NONE",
        "BytesPerSecond": -1,
        "TaskQueueing": "ENABLED",
        "LogLevel": "BASIC",
        "TransferMode": "CHANGED",
        "SecurityDescriptorCopyFlags": "NONE",
        "ObjectTags": "PRESERVE"
```

```
    },
    "Excludes": [{
        "FilterType": "SIMPLE_PATTERN",
        "Value": "/archive-files"
    }],
    "Includes": [{
        "FilterType": "SIMPLE_PATTERN",
        "Value": "/files"
    }],
    "StartTime": "2024-10-16T11:19:56.844000-04:00",
    "EstimatedFilesToTransfer": 7,
    "EstimatedFoldersToTransfer": 2,
    "EstimatedBytesToTransfer": 30,
    "FilesTransferred": 7,
    "FoldersTransferred": 2,
    "BytesWritten": 30,
    "BytesTransferred": 30,
    "BytesCompressed": 30,
    "Result": {
        "PrepareDuration": 0,
        "PrepareStatus": "SUCCESS",
        "TotalDuration": 3310,
        "TransferDuration": 0,
        "TransferStatus": "SUCCESS",
        "VerifyDuration": 0,
        "VerifyStatus": "SUCCESS"
    },
    "FilesDeleted": 0,
    "FilesSkipped": 0,
    "FilesVerified": 7,
    "EstimatedFilesToDelete": 0,
    "TaskMode": "ENHANCED",
    "FilesPrepared": 7,
    "FilesListed": {
        "AtSource": 7,
        "AtDestinationForDelete": 0
    },
    "FilesFailed": {
        "Prepare": 0,
        "Transfer": 0,
        "Verify": 0,
        "Delete": 0
    },
    "FoldersDeleted": 0,
```

```
    "FoldersSkipped": 0,
    "FoldersVerified": 2,
    "FoldersPrepared": 2,
    "FoldersListed": {
        "AtSource": 2,
        "AtDestinationForDelete": 0
    },
    "FoldersFailed": {
        "List": 0,
        "Prepare": 0,
        "Transfer": 0,
        "Verify": 0,
        "Delete": 0
    }
}
```

Sample Response 2 for an Enhanced mode task execution

The following example describes another DataSync task execution that uses Enhanced mode. In this situation, the execution is transferring specific data by using a manifest instead of filters.

```
{
    "TaskExecutionArn": "arn:aws:datasync:us-east-1:111222333444:task/task-
aaaabbbbccccddddf/execution/exec-1234abcd1234abcd1",
    "Status": "SUCCESS",
    "Options": {
        "VerifyMode": "ONLY_FILES_TRANSFERRED",
        "OverwriteMode": "ALWAYS",
        "Atime": "BEST_EFFORT",
        "Mtime": "PRESERVE",
        "Uid": "NONE",
        "Gid": "NONE",
        "PreserveDeletedFiles": "PRESERVE",
        "PreserveDevices": "NONE",
        "PosixPermissions": "NONE",
        "BytesPerSecond": -1,
        "TaskQueueing": "ENABLED",
        "LogLevel": "TRANSFER",
        "TransferMode": "CHANGED",
        "SecurityDescriptorCopyFlags": "NONE",
        "ObjectTags": "PRESERVE"
    },
    "Excludes": [],
```

```
    "Includes": [],
    "ManifestConfig": {
        "Action": "TRANSFER",
        "Format": "CSV",
        "S3AccessRoleArn": "arn:aws:iam::111222333444:role/service-role/
DataSyncS3ManifestAccess",
        "S3Bucket": "arn:aws:s3:::manifests-datasync",
        "VersionId": "Ixs7NQzEOj8BkL9r4ywX2FtDh_cPf3mG",
        "Source": {
            "S3": {
                "ManifestObjectPath": "manifest-folder/manifest-versioned-files",
                "BucketAccessRoleArn": "arn:aws:iam::111222333444:role/my-manifest-
role/DataSyncS3ManifestAccess",
                "S3BucketArn": "arn:aws:s3:::manifests-datasync",
                "ManifestObjectVersionId": "Ixs7NQzEOj8BkL9r4ywX2FtDh_cPf3mG"
            }
        }
    },
    "StartTime": "2024-10-16T09:29:56.757000-04:00",
    "EstimatedFilesToTransfer": 1,
    "EstimatedFoldersToTransfer": 0,
    "EstimatedBytesToTransfer": 6,
    "FilesTransferred": 1,
    "FoldersTransferred": 1,
    "BytesWritten": 6,
    "BytesTransferred": 6,
    "BytesCompressed": 6,
    "Result": {
        "PrepareDuration": 0,
        "PrepareStatus": "SUCCESS",
        "TotalDuration": 3089,
        "TransferDuration": 0,
        "TransferStatus": "SUCCESS",
        "VerifyDuration": 0,
        "VerifyStatus": "SUCCESS"
    },
    "TaskReportConfig": {
        "Destination": {
            "S3": {
                "Subdirectory": "reports/",
                "S3BucketArn": "arn:aws:s3:::my-task-report",
                "BucketAccessRoleArn": "arn:aws:iam::111222333444:role/my-task-report-
role/DataSyncTaskReportS3BucketAccess"
            }
```

```
        },
        "OutputType": "STANDARD",
        "ReportLevel": "SUCCESSES_AND_ERRORS",
        "ObjectVersionIds": "INCLUDE"
    },
    "FilesDeleted": 0,
    "FilesSkipped": 0,
    "FilesVerified": 1,
    "ReportResult": {
        "Status": "SUCCESS"
    },
    "EstimatedFilesToDelete": 0,
    "TaskMode": "ENHANCED",
    "FilesPrepared": 1,
    "FilesListed": {
        "AtSource": 1,
        "AtDestinationForDelete": 0
    },
    "FilesFailed": {
        "Prepare": 0,
        "Transfer": 0,
        "Verify": 0,
        "Delete": 0
    },
    "FoldersDeleted": 0,
    "FoldersSkipped": 0,
    "FoldersVerified": 0,
    "FoldersPrepared": 0,
    "FoldersListed": {
        "AtSource": 0,
        "AtDestinationForDelete": 0
    },
    "FoldersFailed": {
        "List": 0,
        "Prepare": 0,
        "Transfer": 0,
        "Verify": 0,
        "Delete": 0
    }
}
```

Sample Response for a Basic mode task execution

The following example describes a DataSync task execution that uses Basic mode.

```
{
    "TaskExecutionArn": "arn:aws:datasync:us-east-1:111222333444:task/task-
aaaabbbbccccddddf/execution/exec-1234abcd1234abcd1",
    "BytesCompressed": 3500,
    "BytesTransferred": 5000,
    "BytesWritten": 5000,
    "EstimatedBytesToTransfer": 5000,
    "EstimatedFilesToDelete": 10,
    "EstimatedFilesToTransfer": 100,
    "FilesDeleted": 10,
    "FilesSkipped": 0,
    "FilesTransferred": 100,
    "FilesVerified": 100,
    "Result": {
        "PrepareDuration": 100,
        "PrepareStatus": "SUCCESS",
        "TransferDuration": 60,
        "TransferStatus": "SUCCESS",
        "VerifyDuration": 30,
        "VerifyStatus": "SUCCESS"
    },
    "StartTime": "2024-10-16T11:19:56.844000-04:00",
    "Status": "SUCCESS",
    "OverrideOptions": {
        "Atime": "BEST_EFFORT",
        "BytesPerSecond": "1000",
        "Gid": "NONE",
        "Mtime": "PRESERVE",
        "PosixPermissions": "PRESERVE",
        "PreserveDeletedFiles": "PRESERVE",
        "Uid": "NONE",
        "VerifyMode": "POINT_IN_TIME_CONSISTENT"
    },
    "TaskReportConfig": {
        "Destination": {
            "S3": {
                "BucketAccessRoleArn": "arn:aws:iam::111222333444:role/my-datasync-
role",
                "S3BucketArn": "arn:aws:s3:::my-task-reports-bucket/*",
                "Subdirectory": "reports"
```

```
            }
        },
        "ObjectVersionIds": "INCLUDE",
        "OutputType": "STANDARD",
        "Overrides": {
            "Deleted": {
                "ReportLevel": "ERRORS_ONLY"
            },
            "Skipped": {
                "ReportLevel": "SUCCESSES_AND_ERRORS"
            },
            "Transferred": {
                "ReportLevel": "ERRORS_ONLY"
            },
            "Verified": {
                "ReportLevel": "ERRORS_ONLY"
            }
        },
        "ReportLevel": "ERRORS_ONLY"
    }
}
```

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

ListAgents

Returns a list of AWS DataSync agents that belong to an AWS account in the AWS Region specified in the request.

With pagination, you can reduce the number of agents returned in a response. If you get a truncated list of agents in a response, the response contains a marker that you can specify in your next request to fetch the next page of agents.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults

Specifies the maximum number of DataSync agents to list in a response. By default, a response shows a maximum of 100 agents.

Type: Integer

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

Required: No

NextToken

Specifies an opaque string that indicates the position to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

Required: No

Response Syntax

```
{
   "Agents": [
      {
         "AgentArn": "string",
         "Name": "string",
         "Platform": {
            "Version": "string"
         },
         "Status": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

Agents

A list of DataSync agents in your AWS account in the AWS Region specified in the request. The list is ordered by the agents' Amazon Resource Names (ARNs).

Type: Array of AgentListEntry objects

NextToken

The opaque string that indicates the position to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

ListLocations

Returns a list of source and destination locations.

If you have more locations than are returned in a response (that is, the response returns only a truncated list of your agents), the response contains a token that you can specify in your next request to fetch the next page of locations.

Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Operator": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Filters

You can use API filters to narrow down the list of resources returned by `ListLocations`. For example, to retrieve all tasks on a specific source location, you can use `ListLocations` with filter name `LocationType S3` and `Operator Equals`.

Type: Array of LocationFilter objects

Required: No

MaxResults

The maximum number of locations to return.

Type: Integer

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

Required: No

NextToken

An opaque string that indicates the position at which to begin the next list of locations.

Type: String

Length Constraints: Maximum length of 65535.

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

Required: No

Response Syntax

```
{
   "Locations": [
      {
         "LocationArn": "string",
         "LocationUri": "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.

Locations

An array that contains a list of locations.

Type: Array of LocationListEntry objects

NextToken

An opaque string that indicates the position at which to begin returning the next list of locations.

Type: String

Length Constraints: Maximum length of 65535.

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

ListTagsForResource

Returns all the tags associated with an AWS resource.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults

Specifies how many results that you want in the response.

Type: Integer

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

Required: No

NextToken

Specifies an opaque string that indicates the position to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

Required: No

ResourceArn

Specifies the Amazon Resource Name (ARN) of the resource that you want tag information on.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:(((agent|task|location)/(agent|task|loc)-[a-z0-9]{17}(/execution/exec-[a-f0-9]{17})?)|(system/storage-system-[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/job/discovery-job-[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12})?))$`

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

The opaque string that indicates the position to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

Tags

An array of tags applied to the specified resource.

Type: Array of TagListEntry objects

Array Members: Minimum number of 0 items. Maximum number of 55 items.

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

ListTaskExecutions

Returns a list of executions for an AWS DataSync transfer task.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

MaxResults

Specifies how many results you want in the response.

Type: Integer

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

Required: No

NextToken

Specifies an opaque string that indicates the position at which to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

Required: No

TaskArn

Specifies the Amazon Resource Name (ARN) of the task that you want execution information about.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "TaskExecutions": [
      {
         "Status": "string",
         "TaskExecutionArn": "string",
         "TaskMode": "string"
      }
   ]
}
```

Response Elements

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

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

NextToken

The opaque string that indicates the position to begin the next list of results in the response.

Type: String

Length Constraints: Maximum length of 65535.

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

TaskExecutions

A list of the task's executions.

Type: Array of TaskExecutionListEntry objects

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

ListTasks

Returns a list of the AWS DataSync tasks you created.

Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Operator": "string",
         "Values": [ "string" ]
      }
   ],
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Filters

You can use API filters to narrow down the list of resources returned by `ListTasks`. For example, to retrieve all tasks on a specific source location, you can use `ListTasks` with filter name `LocationId` and `Operator Equals` with the ARN for the location.

Type: Array of TaskFilter objects

Required: No

MaxResults

The maximum number of tasks to return.

Type: Integer

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

Required: No

NextToken

An opaque string that indicates the position at which to begin the next list of tasks.

Type: String

Length Constraints: Maximum length of 65535.

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

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Tasks": [
      {
         "Name": "string",
         "Status": "string",
         "TaskArn": "string",
         "TaskMode": "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

An opaque string that indicates the position at which to begin returning the next list of tasks.

Type: String

Length Constraints: Maximum length of 65535.

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

Tasks

A list of all the tasks that are returned.

Type: Array of TaskListEntry objects

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

StartTaskExecution

Starts an AWS DataSync transfer task. For each task, you can only run one task execution at a time.

There are several steps to a task execution. For more information, see Task execution statuses.

> **Important**
>
> If you're planning to transfer data to or from an Amazon S3 location, review how DataSync can affect your S3 request charges and the DataSync pricing page before you begin.

Request Syntax

```
{
   "Excludes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "Includes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "ManifestConfig": {
      "Action": "string",
      "Format": "string",
      "Source": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "ManifestObjectPath": "string",
            "ManifestObjectVersionId": "string",
            "S3BucketArn": "string"
         }
      }
   },
   "OverrideOptions": {
      "Atime": "string",
      "BytesPerSecond": number,
```

```
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TaskArn": "string",
   "TaskReportConfig": {
      "Destination": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "S3BucketArn": "string",
            "Subdirectory": "string"
         }
      },
      "ObjectVersionIds": "string",
      "OutputType": "string",
      "Overrides": {
         "Deleted": {
            "ReportLevel": "string"
         },
         "Skipped": {
            "ReportLevel": "string"
         },
         "Transferred": {
            "ReportLevel": "string"
         },
         "Verified": {
            "ReportLevel": "string"
```

```
            }
        },
        "ReportLevel": "string"
    }
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Excludes

Specifies a list of filter rules that determines which files to exclude from a task. The list contains a single filter string that consists of the patterns to exclude. The patterns are delimited by "|" (that is, a pipe), for example, `"/folder1|/folder2"`.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

Includes

Specifies a list of filter rules that determines which files to include when running a task. The pattern should contain a single filter string that consists of the patterns to include. The patterns are delimited by "|" (that is, a pipe), for example, `"/folder1|/folder2"`.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

ManifestConfig

Configures a manifest, which is a list of files or objects that you want DataSync to transfer. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

When using this parameter, your caller identity (the role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

To remove a manifest configuration, specify this parameter with an empty value.

Type: ManifestConfig object

Required: No

OverrideOptions

Indicates how your transfer task is configured. These options include how DataSync handles files, objects, and their associated metadata during your transfer. You also can specify how to verify data integrity, set bandwidth limits for your task, among other options.

Each option has a default value. Unless you need to, you don't have to configure any option before calling StartTaskExecution.

You also can override your task options for each task execution. For example, you might want to adjust the `LogLevel` for an individual execution.

Type: Options object

Required: No

Tags

Specifies the tags that you want to apply to the Amazon Resource Name (ARN) representing the task execution.

Tags are key-value pairs that help you manage, filter, and search for your DataSync resources.

Type: Array of TagListEntry objects

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

Required: No

TaskArn

Specifies the Amazon Resource Name (ARN) of the task that you want to start.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: Yes

TaskReportConfig

Specifies how you want to configure a task report, which provides detailed information about your DataSync transfer. For more information, see Monitoring your DataSync transfers with task reports.

When using this parameter, your caller identity (the role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

To remove a task report configuration, specify this parameter as empty.

Type: TaskReportConfig object

Required: No

Response Syntax

```
{
   "TaskExecutionArn": "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.

TaskExecutionArn

The ARN of the running task execution.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

HTTP Status Code: 400

Examples

Sample Request

The following example starts a task execution using the default options for the specified task.

```
{
    "OverrideOptions": {
        "Atime": "BEST_EFFORT",
        "BytesPerSecond": 1000,
        "Gid": "NONE",
        "Mtime": "PRESERVE",
        "PosixPermissions": "PRESERVE",
        "PreserveDevices": "NONE",
        "PreserveDeletedFiles": "PRESERVE",
        "Uid": "NONE",
        "VerifyMode": "POINT_IN_TIME_CONSISTENT"
    },
    "TaskArn": "arn:aws:datasync:us-east-2:111222333444:task/task-08de6e6697796f026"
```

```
}
```

Sample Response

This example illustrates one usage of StartTaskExecution.

```
{
  "TaskExecutionArn": "arn:aws:datasync:us-east-2:111222333444:task/
task-08de6e6697796f026/execution/exec-04ce9d516d69bd52f"
}
```

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

TagResource

Applies a *tag* to an AWS resource. Tags are key-value pairs that can help you manage, filter, and search for your resources.

These include AWS DataSync resources, such as locations, tasks, and task executions.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

ResourceArn

Specifies the Amazon Resource Name (ARN) of the resource to apply the tag to.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:(((agent|task|location)/(agent|task|loc)-[a-z0-9]{17}(/execution/exec-[a-f0-9]{17})?)|(system/storage-system-[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/job/discovery-job-[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12})?))$`

Required: Yes

Tags

Specifies the tags that you want to apply to the resource.

Type: Array of TagListEntry objects

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

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UntagResource

Removes tags from an AWS resource.

Request Syntax

```
{
   "Keys": [ "string" ],
   "ResourceArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Keys

Specifies the keys in the tags that you want to remove.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.

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

Pattern: `^[a-zA-Z0-9\s+=._:/-]+$`

Required: Yes

ResourceArn

Specifies the Amazon Resource Name (ARN) of the resource to remove the tags from.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:(((agent|task|location)/(agent|task|loc)-[a-z0-9]{17}(/execution/exec-[a-f0-9]{17})?)|(system/storage-system-[a-f0-9]{8}-`

`[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/job/discovery-job-[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateAgent

Updates the name of an AWS DataSync agent.

Request Syntax

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

Request Parameters

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

The request accepts the following data in JSON format.

AgentArn

The Amazon Resource Name (ARN) of the agent to update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: Yes

Name

The name that you want to use to configure the agent.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationAzureBlob

Modifies the following configurations of the Microsoft Azure Blob Storage transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with Azure Blob Storage.

Request Syntax

```
{
   "AccessTier": "string",
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlobType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "LocationArn": "string",
   "SasConfiguration": {
      "Token": "string"
   },
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessTier

Specifies the access tier that you want your objects or files transferred into. This only applies when using the location as a transfer destination. For more information, see Access tiers.

Type: String

Valid Values: `HOT` | `COOL` | `ARCHIVE`

Required: No

AgentArns

(Optional) Specifies the Amazon Resource Name (ARN) of the DataSync agent that can connect with your Azure Blob Storage container. If you are setting up an agentless cross-cloud transfer, you do not need to specify a value for this parameter.

You can specify more than one agent. For more information, see Using multiple agents for your transfer.

> **Note**
>
> You cannot add or remove agents from a storage location after you initially create it.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

AuthenticationType

Specifies the authentication method DataSync uses to access your Azure Blob Storage. DataSync can access blob storage using a shared access signature (SAS).

Type: String

Valid Values: `SAS` | `NONE`

Required: No

BlobType

Specifies the type of blob that you want your objects or files to be when transferring them into Azure Blob Storage. Currently, DataSync only supports moving data into Azure Blob Storage as block blobs. For more information on blob types, see the Azure Blob Storage documentation.

Type: String

Valid Values: BLOCK

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

LocationArn

Specifies the ARN of the Azure Blob Storage transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

SasConfiguration

Specifies the SAS configuration that allows DataSync to access your Azure Blob Storage.

Type: AzureBlobSasConfiguration object

Required: No

Subdirectory

Specifies path segments if you want to limit your transfer to a virtual directory in your container (for example, `/my/images`).

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^[\p{L}\p{M}\p{Z}\p{S}\p{N}\p{P}\p{C}]*$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationEfs

Modifies the following configuration parameters of the Amazon EFS transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with Amazon EFS.

Request Syntax

```
{
   "AccessPointArn": "string",
   "FileSystemAccessRoleArn": "string",
   "InTransitEncryption": "string",
   "LocationArn": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessPointArn

Specifies the Amazon Resource Name (ARN) of the access point that DataSync uses to mount your Amazon EFS file system.

For more information, see Accessing restricted Amazon EFS file systems.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `(^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):elasticfilesystem:[a-z\-0-9]+:[0-9]{12}:access-point/fsap-[0-9a-f]{8,40}$)|(^$)`

Required: No

FileSystemAccessRoleArn

Specifies an AWS Identity and Access Management (IAM) role that allows DataSync to access your Amazon EFS file system.

For information on creating this role, see Creating a DataSync IAM role for Amazon EFS file system access.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `(^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$)|(^$)`

Required: No

InTransitEncryption

Specifies whether you want DataSync to use Transport Layer Security (TLS) 1.2 encryption when it transfers data to or from your Amazon EFS file system.

If you specify an access point using `AccessPointArn` or an IAM role using `FileSystemAccessRoleArn`, you must set this parameter to `TLS1_2`.

Type: String

Valid Values: `NONE | TLS1_2`

Required: No

LocationArn

Specifies the Amazon Resource Name (ARN) of the Amazon EFS transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Subdirectory

Specifies a mount path for your Amazon EFS file system. This is where DataSync reads or writes data on your file system (depending on if this is a source or destination location).

By default, DataSync uses the root directory (or access point if you provide one by using `AccessPointArn`). You can also include subdirectories using forward slashes (for example, `/path/to/folder`).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationFsxLustre

Modifies the following configuration parameters of the Amazon FSx for Lustre transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with FSx for Lustre.

Request Syntax

```
{
   "LocationArn": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the FSx for Lustre transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Subdirectory

Specifies a mount path for your FSx for Lustre file system. The path can include subdirectories.

When the location is used as a source, DataSync reads data from the mount path. When the location is used as a destination, DataSync writes data to the mount path. If you don't include this parameter, DataSync uses the file system's root directory (/).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationFsxOntap

Modifies the following configuration parameters of the Amazon FSx for NetApp ONTAP transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with FSx for ONTAP.

Request Syntax

```
{
   "LocationArn": "string",
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
         "User": "string"
      }
   },
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the FSx for ONTAP transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Protocol

Specifies the data transfer protocol that DataSync uses to access your Amazon FSx file system.

Type: FsxUpdateProtocol object

Required: No

Subdirectory

Specifies a path to the file share in the storage virtual machine (SVM) where you want to transfer data to or from.

You can specify a junction path (also known as a mount point), qtree path (for NFS file shares), or share name (for SMB file shares). For example, your mount path might be `/vol1`, `/vol1/tree1`, or `/share1`.

> **Note**
>
> Don't specify a junction path in the SVM's root volume. For more information, see Managing FSx for ONTAP storage virtual machines in the *Amazon FSx for NetApp ONTAP User Guide*.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^[^\u0000\u0085\u2028\u2029\r\n]{1,255}$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationFsxOpenZfs

Modifies the following configuration parameters of the Amazon FSx for OpenZFS transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with FSx for OpenZFS.

> **Note**
>
> Request parameters related to SMB aren't supported with the `UpdateLocationFsxOpenZfs` operation.

Request Syntax

```
{
   "LocationArn": "string",
   "Protocol": {
      "NFS": {
         "MountOptions": {
            "Version": "string"
         }
      },
      "SMB": {
         "CmkSecretConfig": {
            "KmsKeyArn": "string",
            "SecretArn": "string"
         },
         "CustomSecretConfig": {
            "SecretAccessRoleArn": "string",
            "SecretArn": "string"
         },
         "Domain": "string",
         "ManagedSecretConfig": {
            "SecretArn": "string"
         },
         "MountOptions": {
            "Version": "string"
         },
         "Password": "string",
         "User": "string"
      }
```

```
   },
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the FSx for OpenZFS transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Protocol

Specifies the data transfer protocol that AWS DataSync uses to access your Amazon FSx file system.

Type: FsxProtocol object

Required: No

Subdirectory

Specifies a subdirectory in the location's path that must begin with `/fsx`. DataSync uses this subdirectory to read or write data (depending on whether the file system is a source or destination location).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationFsxWindows

Modifies the following configuration parameters of the Amazon FSx for Windows File Server transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with FSx for Windows File Server.

Request Syntax

```
{
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "Domain": "string",
   "LocationArn": "string",
   "Password": "string",
   "Subdirectory": "string",
   "User": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as a `Password` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as a `Password` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

Domain

Specifies the name of the Windows domain that your FSx for Windows File Server file system belongs to.

If you have multiple Active Directory domains in your environment, configuring this parameter makes sure that DataSync connects to the right file system.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^([A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252})?$`

Required: No

LocationArn

Specifies the ARN of the FSx for Windows File Server transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

Password

Specifies the password of the user with the permissions to mount and access the files, folders, and file metadata in your FSx for Windows File Server file system.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

Subdirectory

Specifies a mount path for your file system using forward slashes. DataSync uses this subdirectory to read or write data (depending on whether the file system is a source or destination location).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: No

User

Specifies the user with the permissions to mount and access the files, folders, and file metadata in your FSx for Windows File Server file system.

For information about choosing a user with the right level of access for your transfer, see required permissions for FSx for Windows File Server locations.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationHdfs

Modifies the following configuration parameters of the Hadoop Distributed File System (HDFS) transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with an HDFS cluster.

Request Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "BlockSize": number,
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "KerberosKeytab": blob,
   "KerberosKrb5Conf": blob,
   "KerberosPrincipal": "string",
   "KmsKeyProviderUri": "string",
   "LocationArn": "string",
   "NameNodes": [
      {
         "Hostname": "string",
         "Port": number
      }
   ],
   "QopConfiguration": {
      "DataTransferProtection": "string",
      "RpcProtection": "string"
   },
   "ReplicationFactor": number,
   "SimpleUser": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArns

The Amazon Resource Names (ARNs) of the DataSync agents that can connect to your HDFS cluster.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

AuthenticationType

The type of authentication used to determine the identity of the user.

Type: String

Valid Values: `SIMPLE | KERBEROS`

Required: No

BlockSize

The size of the data blocks to write into the HDFS cluster.

Type: Integer

Valid Range: Minimum value of 1048576. Maximum value of 1073741824.

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as a `KerberosKeytab` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as a `KerberosKeytab` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

KerberosKeytab

The Kerberos key table (keytab) that contains mappings between the defined Kerberos principal and the encrypted keys. You can load the keytab from a file by providing the file's address.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 65536.

Required: No

KerberosKrb5Conf

The `krb5.conf` file that contains the Kerberos configuration information. You can load the `krb5.conf` file by providing the file's address. If you're using the AWS CLI, it performs the base64 encoding for you. Otherwise, provide the base64-encoded text.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 131072.

Required: No

KerberosPrincipal

The Kerberos principal with access to the files and folders on the HDFS cluster.

Type: String

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

Pattern: ^.+$

Required: No

KmsKeyProviderUri

The URI of the HDFS cluster's Key Management Server (KMS).

Type: String

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

Pattern: ^kms:\/\/http[s]?@(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9])(;(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9]))*:[0-9]{1,5}\/kms$

Required: No

LocationArn

The Amazon Resource Name (ARN) of the source HDFS cluster location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: ^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$

Required: Yes

NameNodes

The NameNode that manages the HDFS namespace. The NameNode performs operations such as opening, closing, and renaming files and directories. The NameNode contains the information to map blocks of data to the DataNodes.

The number of NameNodes you can specify depends on the task mode:

- **Enhanced mode** – You can specify multiple NameNodes for HDFS High Availability (HA) configurations.
- **Basic mode** – You can specify only one NameNode.

Type: Array of HdfsNameNode objects

Array Members: Minimum number of 1 item.

Required: No

QopConfiguration

The Quality of Protection (QOP) configuration specifies the Remote Procedure Call (RPC) and data transfer privacy settings configured on the Hadoop Distributed File System (HDFS) cluster.

Type: QopConfiguration object

Required: No

ReplicationFactor

The number of DataNodes to replicate the data to when writing to the HDFS cluster.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 512.

Required: No

SimpleUser

The user name used to identify the client on the host operating system.

Type: String

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

Pattern: `^[_.A-Za-z0-9][-_.A-Za-z0-9]*$`

Required: No

Subdirectory

A subdirectory in the HDFS cluster. This subdirectory is used to read data from or write data to the HDFS cluster.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationNfs

Modifies the following configuration parameters of the Network File System (NFS) transfer location that you're using with AWS DataSync.

For more information, see Configuring transfers with an NFS file server.

Request Syntax

```
{
   "LocationArn": "string",
   "MountOptions": {
      "Version": "string"
   },
   "OnPremConfig": {
      "AgentArns": [ "string" ]
   },
   "ServerHostname": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the NFS transfer location that you want to update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

MountOptions

Specifies how DataSync can access a location using the NFS protocol.

Type: NfsMountOptions object

Required: No

OnPremConfig

The AWS DataSync agents that can connect to your Network File System (NFS) file server.

Type: OnPremConfig object

Required: No

ServerHostname

Specifies the DNS name or IP address (IPv4 or IPv6) of the NFS file server that your DataSync agent connects to.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: No

Subdirectory

Specifies the export path in your NFS file server that you want DataSync to mount.

This path (or a subdirectory of the path) is where DataSync transfers data to or from. For information on configuring an export for DataSync, see Accessing NFS file servers.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]+$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationObjectStorage

Modifies the following configuration parameters of the object storage transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with an object storage system.

Request Syntax

```
{
   "AccessKey": "string",
   "AgentArns": [ "string" ],
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "LocationArn": "string",
   "SecretKey": "string",
   "ServerCertificate": blob,
   "ServerHostname": "string",
   "ServerPort": number,
   "ServerProtocol": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AccessKey

Specifies the access key (for example, a user name) if credentials are required to authenticate with the object storage server.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `^.*$`

Required: No

AgentArns

(Optional) Specifies the Amazon Resource Names (ARNs) of the DataSync agents that can connect with your object storage system. If you are setting up an agentless cross-cloud transfer, you do not need to specify a value for this parameter.

> **Note**
>
> You cannot add or remove agents from a storage location after you initially create it.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

LocationArn

Specifies the ARN of the object storage system location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

SecretKey

Specifies the secret key (for example, a password) if credentials are required to authenticate with the object storage server.

> **Note**
>
> If you provide a secret using `SecretKey`, but do not provide secret configuration details using `CmkSecretConfig` or `CustomSecretConfig`, then DataSync stores the token using your AWS account's Secrets Manager secret.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `^.*$`

Required: No

ServerCertificate

Specifies a certificate chain for DataSync to authenticate with your object storage system if the system uses a private or self-signed certificate authority (CA). You must specify a single `.pem` file with a full certificate chain (for example, `file:///home/user/.ssh/object_storage_certificates.pem`).

The certificate chain might include:

- The object storage system's certificate
- All intermediate certificates (if there are any)
- The root certificate of the signing CA

You can concatenate your certificates into a `.pem` file (which can be up to 32768 bytes before base64 encoding). The following example `cat` command creates an `object_storage_certificates.pem` file that includes three certificates:

```
cat object_server_certificate.pem intermediate_certificate.pem
ca_root_certificate.pem > object_storage_certificates.pem
```

To use this parameter, configure `ServerProtocol` to `HTTPS`.

Updating this parameter doesn't interfere with tasks that you have in progress.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 32768.

Required: No

ServerHostname

Specifies the domain name or IP address (IPv4 or IPv6) of the object storage server that your DataSync agent connects to.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: No

ServerPort

Specifies the port that your object storage server accepts inbound network traffic on (for example, port 443).

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65536.

Required: No

ServerProtocol

Specifies the protocol that your object storage server uses to communicate.

Type: String

Valid Values: `HTTPS | HTTP`

Required: No

Subdirectory

Specifies the object prefix for your object storage server. If this is a source location, DataSync only copies objects with this prefix. If this is a destination location, DataSync writes all objects with this prefix.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationS3

Modifies the following configuration parameters of the Amazon S3 transfer location that you're using with AWS DataSync.

> **Important**
>
> Before you begin, make sure that you read the following topics:
>
> - Storage class considerations with Amazon S3 locations
> - Evaluating S3 request costs when using DataSync

Request Syntax

```
{
   "LocationArn": "string",
   "S3Config": {
      "BucketAccessRoleArn": "string"
   },
   "S3StorageClass": "string",
   "Subdirectory": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

LocationArn

Specifies the Amazon Resource Name (ARN) of the Amazon S3 transfer location that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

S3Config

Specifies the Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that DataSync uses to access your S3 bucket.

For more information, see Providing DataSync access to S3 buckets.

Type: S3Config object

Required: No

S3StorageClass

Specifies the storage class that you want your objects to use when Amazon S3 is a transfer destination.

For buckets in AWS Regions, the storage class defaults to STANDARD. For buckets on AWS Outposts, the storage class defaults to OUTPOSTS.

For more information, see Storage class considerations with Amazon S3 transfers.

Type: String

Valid Values: `STANDARD | STANDARD_IA | ONEZONE_IA | INTELLIGENT_TIERING | GLACIER | DEEP_ARCHIVE | OUTPOSTS | GLACIER_INSTANT_RETRIEVAL`

Required: No

Subdirectory

Specifies a prefix in the S3 bucket that DataSync reads from or writes to (depending on whether the bucket is a source or destination location).

> **Note**
>
> DataSync can't transfer objects with a prefix that begins with a slash (/) or includes `//`, `/./`, or `/../` patterns. For example:
>
> - `/photos`
> - `photos//2006/January`
> - `photos/./2006/February`

- `photos/../2006/March`

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateLocationSmb

Modifies the following configuration parameters of the Server Message Block (SMB) transfer location that you're using with AWS DataSync.

For more information, see Configuring DataSync transfers with an SMB file server.

Request Syntax

```
{
   "AgentArns": [ "string" ],
   "AuthenticationType": "string",
   "CmkSecretConfig": {
      "KmsKeyArn": "string",
      "SecretArn": "string"
   },
   "CustomSecretConfig": {
      "SecretAccessRoleArn": "string",
      "SecretArn": "string"
   },
   "DnsIpAddresses": [ "string" ],
   "Domain": "string",
   "KerberosKeytab": blob,
   "KerberosKrb5Conf": blob,
   "KerberosPrincipal": "string",
   "LocationArn": "string",
   "MountOptions": {
      "Version": "string"
   },
   "Password": "string",
   "ServerHostname": "string",
   "Subdirectory": "string",
   "User": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

AgentArns

Specifies the DataSync agent (or agents) that can connect to your SMB file server. You specify an agent by using its Amazon Resource Name (ARN).

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

AuthenticationType

Specifies the authentication protocol that DataSync uses to connect to your SMB file server. DataSync supports `NTLM` (default) and `KERBEROS` authentication.

For more information, see Providing DataSync access to SMB file servers.

Type: String

Valid Values: `NTLM | KERBEROS`

Required: No

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as a `Password` or `KerberosKeytab` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as a `Password` or `KerberosKeytab` or set of credentials that DataSync uses to access a specific transfer location,

and a customer-managed AWS Identity and Access Management (IAM) role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

DnsIpAddresses

Specifies the IP addresses (IPv4 or IPv6) for the DNS servers that your SMB file server belongs to. This parameter applies only if `AuthenticationType` is set to `KERBEROS`.

If you have multiple domains in your environment, configuring this parameter makes sure that DataSync connects to the right SMB file server.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 7. Maximum length of 39.

Pattern: `\A((25[0-5]|2[0-4]\d|[0-1]?\d?\d)(\.(25[0-5]|2[0-4]\d|[0-1]?\d?\d)){3}|([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}))\z`

Required: No

Domain

Specifies the Windows domain name that your SMB file server belongs to. This parameter applies only if `AuthenticationType` is set to `NTLM`.

If you have multiple domains in your environment, configuring this parameter makes sure that DataSync connects to the right file server.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

Required: No

KerberosKeytab

Specifies your Kerberos key table (keytab) file, which includes mappings between your Kerberos principal and encryption keys.

To avoid task execution errors, make sure that the Kerberos principal that you use to create the keytab file matches exactly what you specify for `KerberosPrincipal`.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 65536.

Required: No

KerberosKrb5Conf

Specifies a Kerberos configuration file (`krb5.conf`) that defines your Kerberos realm configuration.

The file must be base64 encoded. If you're using the AWS CLI, the encoding is done for you.

Type: Base64-encoded binary data object

Length Constraints: Maximum length of 131072.

Required: No

KerberosPrincipal

Specifies a Kerberos prinicpal, which is an identity in your Kerberos realm that has permission to access the files, folders, and file metadata in your SMB file server.

A Kerberos principal might look like `HOST/kerberosuser@MYDOMAIN.ORG`.

Principal names are case sensitive. Your DataSync task execution will fail if the principal that you specify for this parameter doesn't exactly match the principal that you use to create the keytab file.

Type: String

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

Pattern: `^.+$`

Required: No

LocationArn

Specifies the ARN of the SMB location that you want to update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: Yes

MountOptions

Specifies the version of the Server Message Block (SMB) protocol that AWS DataSync uses to access an SMB file server.

Type: SmbMountOptions object

Required: No

Password

Specifies the password of the user who can mount your SMB file server and has permission to access the files and folders involved in your transfer. This parameter applies only if `AuthenticationType` is set to `NTLM`.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

ServerHostname

Specifies the domain name or IP address (IPv4 or IPv6) of the SMB file server that your DataSync agent connects to.

> **Note**
>
> If you're using Kerberos authentication, you must specify a domain name.

Type: String

Length Constraints: Maximum length of 255.

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-:]*[A-Za-z0-9])$`

Required: No

Subdirectory

Specifies the name of the share exported by your SMB file server where DataSync will read or write data. You can include a subdirectory in the share path (for example, `/path/to/subdirectory`). Make sure that other SMB clients in your network can also mount this path.

To copy all data in the specified subdirectory, DataSync must be able to mount the SMB share and access all of its data. For more information, see Providing DataSync access to SMB file servers.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\$\p{Zs}]+$`

Required: No

User

Specifies the user name that can mount your SMB file server and has permission to access the files and folders involved in your transfer. This parameter applies only if `AuthenticationType` is set to `NTLM`.

For information about choosing a user with the right level of access for your transfer, see Providing DataSync access to SMB file servers.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateTask

Updates the configuration of a *task*, which defines where and how AWS DataSync transfers your data.

Request Syntax

```
{
   "CloudWatchLogGroupArn": "string",
   "Excludes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "Includes": [
      {
         "FilterType": "string",
         "Value": "string"
      }
   ],
   "ManifestConfig": {
      "Action": "string",
      "Format": "string",
      "Source": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "ManifestObjectPath": "string",
            "ManifestObjectVersionId": "string",
            "S3BucketArn": "string"
         }
      }
   },
   "Name": "string",
   "Options": {
      "Atime": "string",
      "BytesPerSecond": number,
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
```

```
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "Schedule": {
      "ScheduleExpression": "string",
      "Status": "string"
   },
   "TaskArn": "string",
   "TaskReportConfig": {
      "Destination": {
         "S3": {
            "BucketAccessRoleArn": "string",
            "S3BucketArn": "string",
            "Subdirectory": "string"
         }
      },
      "ObjectVersionIds": "string",
      "OutputType": "string",
      "Overrides": {
         "Deleted": {
            "ReportLevel": "string"
         },
         "Skipped": {
            "ReportLevel": "string"
         },
         "Transferred": {
            "ReportLevel": "string"
         },
         "Verified": {
            "ReportLevel": "string"
         }
      },
      "ReportLevel": "string"
   }
}
```

Request Parameters

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

The request accepts the following data in JSON format.

CloudWatchLogGroupArn

Specifies the Amazon Resource Name (ARN) of an Amazon CloudWatch log group for monitoring your task.

For Enhanced mode tasks, you must use `/aws/datasync` as your log group name. For example:

`arn:aws:logs:us-east-1:111222333444:log-group:/aws/datasync:*`

For more information, see Monitoring data transfers with CloudWatch Logs.

Type: String

Length Constraints: Maximum length of 562.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):logs:[a-z\-0-9]+:[0-9]{12}:log-group:([^:\*]*)(:\*)?$`

Required: No

Excludes

Specifies exclude filters that define the files, objects, and folders in your source location that you don't want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

Includes

Specifies include filters define the files, objects, and folders in your source location that you want DataSync to transfer. For more information and examples, see Specifying what DataSync transfers by using filters.

Type: Array of FilterRule objects

Array Members: Minimum number of 0 items. Maximum number of 1 item.

Required: No

ManifestConfig

Configures a manifest, which is a list of files or objects that you want DataSync to transfer. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

When using this parameter, your caller identity (the IAM role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

To remove a manifest configuration, specify this parameter as empty.

Type: ManifestConfig object

Required: No

Name

Specifies the name of your task.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Required: No

Options

Indicates how your transfer task is configured. These options include how DataSync handles files, objects, and their associated metadata during your transfer. You also can specify how to verify data integrity, set bandwidth limits for your task, among other options.

Each option has a default value. Unless you need to, you don't have to configure any option before calling StartTaskExecution.

You also can override your task options for each task execution. For example, you might want to adjust the `LogLevel` for an individual execution.

Type: Options object

Required: No

Schedule

Specifies a schedule for when you want your task to run. For more information, see Scheduling your task.

Type: TaskSchedule object

Required: No

TaskArn

Specifies the ARN of the task that you want to update.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: Yes

TaskReportConfig

Specifies how you want to configure a task report, which provides detailed information about your DataSync transfer. For more information, see Monitoring your DataSync transfers with task reports.

When using this parameter, your caller identity (the IAM role that you're using DataSync with) must have the `iam:PassRole` permission. The AWSDataSyncFullAccess policy includes this permission.

To remove a task report configuration, specify this parameter as empty.

Type: TaskReportConfig object

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.

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

UpdateTaskExecution

Updates the configuration of a running AWS DataSync task execution.

> **Note**
>
> Currently, the only `Option` that you can modify with `UpdateTaskExecution` is `BytesPerSecond` , which throttles bandwidth for a running or queued task execution.

Request Syntax

```
{
   "Options": {
      "Atime": "string",
      "BytesPerSecond": number,
      "Gid": "string",
      "LogLevel": "string",
      "Mtime": "string",
      "ObjectMetadata": "string",
      "ObjectTags": "string",
      "OverwriteMode": "string",
      "PosixPermissions": "string",
      "PreserveDeletedFiles": "string",
      "PreserveDevices": "string",
      "SecurityDescriptorCopyFlags": "string",
      "TaskQueueing": "string",
      "TransferMode": "string",
      "Uid": "string",
      "VerifyMode": "string"
   },
   "TaskExecutionArn": "string"
}
```

Request Parameters

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

The request accepts the following data in JSON format.

Options

Indicates how your transfer task is configured. These options include how DataSync handles files, objects, and their associated metadata during your transfer. You also can specify how to verify data integrity, set bandwidth limits for your task, among other options.

Each option has a default value. Unless you need to, you don't have to configure any option before calling StartTaskExecution.

You also can override your task options for each task execution. For example, you might want to adjust the `LogLevel` for an individual execution.

Type: Options object

Required: Yes

TaskExecutionArn

Specifies the Amazon Resource Name (ARN) of the task execution that you're updating.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

Required: Yes

Response Elements

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

Errors

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

InternalException

This exception is thrown when an error occurs in the AWS DataSync service.

HTTP Status Code: 500

InvalidRequestException

This exception is thrown when the client submits a malformed request.

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

Data Types

The AWS DataSync 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:

- AgentListEntry
- AzureBlobSasConfiguration
- CmkSecretConfig
- CustomSecretConfig
- Ec2Config
- FilterRule
- FsxProtocol
- FsxProtocolNfs
- FsxProtocolSmb
- FsxUpdateProtocol
- FsxUpdateProtocolSmb
- HdfsNameNode
- LocationFilter
- LocationListEntry
- ManagedSecretConfig
- ManifestConfig
- NfsMountOptions
- OnPremConfig
- Options
- Platform

- PrivateLinkConfig
- QopConfiguration
- ReportDestination
- ReportDestinationS3
- ReportOverride
- ReportOverrides
- ReportResult
- S3Config
- S3ManifestConfig
- SmbMountOptions
- SourceManifestConfig
- TagListEntry
- TaskExecutionFilesFailedDetail
- TaskExecutionFilesListedDetail
- TaskExecutionFoldersFailedDetail
- TaskExecutionFoldersListedDetail
- TaskExecutionListEntry
- TaskExecutionResultDetail
- TaskFilter
- TaskListEntry
- TaskReportConfig
- TaskSchedule
- TaskScheduleDetails

AgentListEntry

Represents a single entry in a list (or array) of AWS DataSync agents when you call the ListAgents operation.

Contents

AgentArn

The Amazon Resource Name (ARN) of a DataSync agent.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{17}$`

Required: No

Name

The name of an agent.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Required: No

Platform

The platform-related details about the agent, such as the version number.

Type: Platform object

Required: No

Status

The status of an agent.

- If the status is `ONLINE`, the agent is configured properly and ready to use.

- If the status is `OFFLINE`, the agent has been out of contact with DataSync for five minutes or longer. This can happen for a few reasons. For more information, see What do I do if my agent is offline?

Type: String

Valid Values: `ONLINE | OFFLINE`

Required: No

See Also

For 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

AzureBlobSasConfiguration

The shared access signature (SAS) configuration that allows AWS DataSync to access your Microsoft Azure Blob Storage.

For more information, see SAS tokens for accessing your Azure Blob Storage.

Contents

Token

Specifies a SAS token that provides permissions to access your Azure Blob Storage.

The token is part of the SAS URI string that comes after the storage resource URI and a question mark. A token looks something like this:

`sp=r&st=2023-12-20T14:54:52Z&se=2023-12-20T22:54:52Z&spr=https&sv=2021-06-08&s`
`%2FXTI9E%2F%2Fmq171%2BZU178wcwqU%3D`

Type: String

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

Pattern: `^.+$`

Required: Yes

See Also

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

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

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as an authentication token, secret key, password, or Kerberos keytab that DataSync uses to access a specific storage location, with a customer-managed AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` or `CustomSecretConfig` to provide credentials for a `CreateLocation` request. Do not provide both parameters for the same request.

Contents

KmsKeyArn

Specifies the ARN for the customer-managed AWS KMS key that DataSync uses to encrypt the DataSync-managed secret stored for `SecretArn`. DataSync provides this key to AWS Secrets Manager.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^(arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):kms:[a-z\-0-9]+:[0-9]{12}:key/.*|)$`

Required: No

SecretArn

Specifies the ARN for the DataSync-managed AWS Secrets Manager secret that that is used to access a specific storage location. This property is generated by DataSync and is read-only. DataSync encrypts this secret with the KMS key that you specify for `KmsKeyArn`.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^(arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):secretsmanager:[a-z\-0-9]+:[0-9]{12}:secret:.*|)$`

Required: No

See Also

For 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

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where a storage location credentials is stored in Secrets Manager as plain text (for authentication token, secret key, or password) or as binary (for Kerberos keytab). This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret.

> **Note**
>
> You can use either `CmkSecretConfig` or `CustomSecretConfig` to provide credentials for a `CreateLocation` request. Do not provide both parameters for the same request.

Contents

SecretAccessRoleArn

Specifies the ARN for the AWS Identity and Access Management role that DataSync uses to access the secret specified for `SecretArn`.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^(arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/[a-zA-Z0-9+=,.@_/-]+|)$`

Required: No

SecretArn

Specifies the ARN for an AWS Secrets Manager secret.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^(arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):secretsmanager:[a-z\-0-9]+:[0-9]{12}:secret:.*|)$`

Required: No

See Also

For 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

Ec2Config

The subnet and security groups that AWS DataSync uses to connect to one of your Amazon EFS file system's mount targets.

Contents

SecurityGroupArns

Specifies the Amazon Resource Names (ARNs) of the security groups associated with an Amazon EFS file system's mount target.

Type: Array of strings

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

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: Yes

SubnetArn

Specifies the ARN of a subnet where DataSync creates the network interfaces for managing traffic during your transfer.

The subnet must be located:

- In the same virtual private cloud (VPC) as the Amazon EFS file system.
- In the same Availability Zone as at least one mount target for the Amazon EFS file system.

> **Note**
>
> You don't need to specify a subnet that includes a file system mount target.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:subnet/subnet-[a-f0-9]+$`

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

FilterRule

Specifies which files, folders, and objects to include or exclude when transferring files from source to destination.

Contents

FilterType

The type of filter rule to apply. AWS DataSync only supports the SIMPLE_PATTERN rule type.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^[A-Z0-9_]+$`

Valid Values: `SIMPLE_PATTERN`

Required: No

Value

A single filter string that consists of the patterns to include or exclude. The patterns are delimited by "|" (that is, a pipe), for example: `/folder1|/folder2`

Type: String

Length Constraints: Maximum length of 102400.

Pattern: `^[^\x00]+$`

Required: No

See Also

For 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

FsxProtocol

Specifies the data transfer protocol that AWS DataSync uses to access your Amazon FSx file system.

Contents

NFS

Specifies the Network File System (NFS) protocol configuration that DataSync uses to access your FSx for OpenZFS file system or FSx for ONTAP file system's storage virtual machine (SVM).

Type: FsxProtocolNfs object

Required: No

SMB

Specifies the Server Message Block (SMB) protocol configuration that DataSync uses to access your FSx for ONTAP file system's SVM.

Type: FsxProtocolSmb 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

FsxProtocolNfs

Specifies the Network File System (NFS) protocol configuration that DataSync uses to access your FSx for OpenZFS file system or FSx for ONTAP file system's storage virtual machine (SVM).

Contents

MountOptions

Specifies how DataSync can access a location using the NFS protocol.

Type: NfsMountOptions 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

FsxProtocolSmb

Specifies the Server Message Block (SMB) protocol configuration that AWS DataSync uses to access your Amazon FSx for NetApp ONTAP file system's storage virtual machine (SVM). For more information, see Providing DataSync access to FSx for ONTAP file systems.

Contents

User

Specifies a user that can mount and access the files, folders, and metadata in your SVM.

For information about choosing a user with the right level of access for your transfer, see Using the SMB protocol.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Required: Yes

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, which includes the password that DataSync uses to access a specific FSx for ONTAP storage location (using SMB), with a customer-managed AWS KMS key.

When you include this parameter as part of a `CreateLocationFsxOntap` request, you provide only the KMS key ARN. DataSync uses this KMS key together with the `Password` you specify for to create a DataSync-managed secret to store the location access credentials.

Make sure that DataSync has permission to access the KMS key that you specify. For more information, see Using a service-managed secret encrypted with a custom AWS KMS key.

> **Note**
>
> You can use either `CmkSecretConfig` (with `Password`) or `CustomSecretConfig` (without `Password`) to provide credentials for a `CreateLocationFsxOntap` request. Do not provide both parameters for the same request.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed Secrets Manager secret where the password for an FSx for ONTAP storage location (using SMB) is stored in plain text, in Secrets Manager. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret. For more information, see Using a secret that you manage.

> **Note**
>
> You can use either `CmkSecretConfig` (with `Password`) or `CustomSecretConfig` (without `Password`) to provide credentials for a `CreateLocationFsxOntap` request. Do not provide both parameters for the same request.

Type: CustomSecretConfig object

Required: No

Domain

Specifies the name of the Windows domain that your storage virtual machine (SVM) belongs to.

If you have multiple domains in your environment, configuring this setting makes sure that DataSync connects to the right SVM.

If you have multiple Active Directory domains in your environment, configuring this parameter makes sure that DataSync connects to the right SVM.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^[A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252}$`

Required: No

ManagedSecretConfig

Describes configuration information for a DataSync-managed secret, such as a `Password` that DataSync uses to access a specific storage location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

> **Note**
>
> Do not provide this for a `CreateLocation` request. `ManagedSecretConfig` is a ReadOnly property and is only be populated in the `DescribeLocation` response.

Type: ManagedSecretConfig object

Required: No

MountOptions

Specifies the version of the Server Message Block (SMB) protocol that AWS DataSync uses to access an SMB file server.

Type: SmbMountOptions object

Required: No

Password

Specifies the password of a user who has permission to access your SVM.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

See Also

For 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

FsxUpdateProtocol

Specifies the data transfer protocol that AWS DataSync uses to access your Amazon FSx file system.

> **Note**
>
> You can't update the Network File System (NFS) protocol configuration for FSx for ONTAP locations. DataSync currently only supports NFS version 3 with this location type.

Contents

NFS

Specifies the Network File System (NFS) protocol configuration that DataSync uses to access your FSx for OpenZFS file system or FSx for ONTAP file system's storage virtual machine (SVM).

Type: FsxProtocolNfs object

Required: No

SMB

Specifies the Server Message Block (SMB) protocol configuration that DataSync uses to access your FSx for ONTAP file system's storage virtual machine (SVM).

Type: FsxUpdateProtocolSmb 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

FsxUpdateProtocolSmb

Specifies the Server Message Block (SMB) protocol configuration that AWS DataSync uses to access your Amazon FSx for NetApp ONTAP file system's storage virtual machine (SVM). For more information, see Providing DataSync access to FSx for ONTAP file systems.

Contents

CmkSecretConfig

Specifies configuration information for a DataSync-managed secret, such as a `Password` or set of credentials that DataSync uses to access a specific transfer location, and a customer-managed AWS KMS key.

Type: CmkSecretConfig object

Required: No

CustomSecretConfig

Specifies configuration information for a customer-managed secret, such as a `Password` or set of credentials that DataSync uses to access a specific transfer location. This configuration includes the secret ARN, and the ARN for an IAM role that provides access to the secret.

Type: CustomSecretConfig object

Required: No

Domain

Specifies the name of the Windows domain that your storage virtual machine (SVM) belongs to.

If you have multiple Active Directory domains in your environment, configuring this parameter makes sure that DataSync connects to the right SVM.

Type: String

Length Constraints: Maximum length of 253.

Pattern: `^([A-Za-z0-9]((\.|-+)?[A-Za-z0-9]){0,252})?$`

Required: No

MountOptions

Specifies the version of the Server Message Block (SMB) protocol that AWS DataSync uses to access an SMB file server.

Type: SmbMountOptions object

Required: No

Password

Specifies the password of a user who has permission to access your SVM.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^.{0,104}$`

Required: No

User

Specifies a user that can mount and access the files, folders, and metadata in your SVM.

For information about choosing a user with the right level of access for your transfer, see Using the SMB protocol.

Type: String

Length Constraints: Maximum length of 104.

Pattern: `^[^\x22\x5B\x5D/\\:;|=,+*?\x3C\x3E]{1,104}$`

Required: No

See Also

For 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

HdfsNameNode

The NameNode of the Hadoop Distributed File System (HDFS). The NameNode manages the file system's namespace. The NameNode performs operations such as opening, closing, and renaming files and directories. The NameNode contains the information to map blocks of data to the DataNodes.

Contents

Hostname

The hostname of the NameNode in the HDFS cluster. This value is the IP address or Domain Name Service (DNS) name of the NameNode. An agent that's installed on-premises uses this hostname to communicate with the NameNode in the network.

Type: String

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

Pattern: `^(([a-zA-Z0-9\-]*[a-zA-Z0-9])\.)*([A-Za-z0-9\-]*[A-Za-z0-9])$`

Required: Yes

Port

The port that the NameNode uses to listen to client requests.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 65536.

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

LocationFilter

Narrow down the list of resources returned by `ListLocations`. For example, to see all your Amazon S3 locations, create a filter using `"Name": "LocationType"`, `"Operator": "Equals"`, and `"Values": "S3"`.

For more information, see filtering resources.

Contents

Name

The name of the filter being used. Each API call supports a list of filters that are available for it (for example, `LocationType` for `ListLocations`).

Type: String

Valid Values: `LocationUri | LocationType | CreationTime`

Required: Yes

Operator

The operator that is used to compare filter values (for example, `Equals` or `Contains`).

Type: String

Valid Values: `Equals | NotEquals | In | LessThanOrEqual | LessThan | GreaterThanOrEqual | GreaterThan | Contains | NotContains | BeginsWith`

Required: Yes

Values

The values that you want to filter for. For example, you might want to display only Amazon S3 locations.

Type: Array of strings

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

Pattern: `^[0-9a-zA-Z_\ \-\:\*\.\\/\?-]*$`

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

LocationListEntry

Represents a single entry in a list of locations. `LocationListEntry` returns an array that contains a list of locations when the ListLocations operation is called.

Contents

LocationArn

The Amazon Resource Name (ARN) of the location. For Network File System (NFS) or Amazon EFS, the location is the export path. For Amazon S3, the location is the prefix path that you want to mount and use as the root of the location.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:location/loc-[0-9a-z]{17}$`

Required: No

LocationUri

Represents a list of URIs of a location. `LocationUri` returns an array that contains a list of locations when the ListLocations operation is called.

Format: `TYPE://GLOBAL_ID/SUBDIR`.

TYPE designates the type of location (for example, `nfs` or `s3`).

GLOBAL_ID is the globally unique identifier of the resource that backs the location. An example for EFS is `us-east-2.fs-abcd1234`. An example for Amazon S3 is the bucket name, such as `myBucket`. An example for NFS is a valid IPv4 or IPv6 address or a hostname that is compliant with DNS.

SUBDIR is a valid file system path, delimited by forward slashes as is the *nix convention. For NFS and Amazon EFS, it's the export path to mount the location. For Amazon S3, it's the prefix path that you mount to and treat as the root of the location.

Type: String

Length Constraints: Maximum length of 4360.

Pattern: `^(efs|nfs|s3|smb|hdfs|fsx[a-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

ManagedSecretConfig

Specifies configuration information for a DataSync-managed secret, such as an authentication token or set of credentials that DataSync uses to access a specific transfer location. DataSync uses the default AWS-managed KMS key to encrypt this secret in AWS Secrets Manager.

Contents

SecretArn

Specifies the ARN for an AWS Secrets Manager secret.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^(arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):secretsmanager:[a-z\-0-9]+:[0-9]{12}:secret:.*|)$`

Required: No

See Also

For 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

ManifestConfig

Configures a manifest, which is a list of files or objects that you want AWS DataSync to transfer. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

Contents

Action

Specifies what DataSync uses the manifest for.

Type: String

Valid Values: `TRANSFER`

Required: No

Format

Specifies the file format of your manifest. For more information, see Creating a manifest.

Type: String

Valid Values: `CSV`

Required: No

Source

Specifies the manifest that you want DataSync to use and where it's hosted.

> **Note**
>
> You must specify this parameter if you're configuring a new manifest on or after February 7, 2024.
> If you don't, you'll get a 400 status code and `ValidationException` error stating that you're missing the IAM role for DataSync to access the S3 bucket where you're hosting your manifest. For more information, see Providing DataSync access to your manifest.

Type: SourceManifestConfig 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

NfsMountOptions

Specifies how DataSync can access a location using the NFS protocol.

Contents

Version

Specifies the NFS version that you want DataSync to use when mounting your NFS share. If the server refuses to use the version specified, the task fails.

You can specify the following options:

- `AUTOMATIC` (default): DataSync chooses NFS version 4.1. For Amazon FSx for OpenZFS locations, DataSync first attempts to use NFS version 4.2, then falls back to version 4.1, and then to earlier versions if needed.
- `NFS3`: Stateless protocol version that allows for asynchronous writes on the server.
- `NFSv4_0`: Stateful, firewall-friendly protocol version that supports delegations and pseudo file systems.
- `NFSv4_1`: Stateful protocol version that supports sessions, directory delegations, and parallel data processing. NFS version 4.1 also includes all features available in version 4.0.
- `NFSv4_2`: Stateful protocol version that supports sparse file operations, space reservation, and server-side copy operations, in addition to all features available in version 4.1. Selecting NFS version 4.2 requires an Enhanced mode task.

> **Note**
>
> DataSync currently only supports NFS version 3 with Amazon FSx for NetApp ONTAP locations.

Type: String

Valid Values: `AUTOMATIC | NFS3 | NFS4_0 | NFS4_1 | NFS4_2`

Required: No

See Also

For 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

OnPremConfig

The AWS DataSync agents that can connect to your Network File System (NFS) file server.

Contents

AgentArns

The Amazon Resource Names (ARNs) of the DataSync agents that can connect to your NFS file server.

You can specify more than one agent. For more information, see Using multiple DataSync agents.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 8 items.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:agent/agent-[0-9a-z]{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

Options

Indicates how your transfer task is configured. These options include how DataSync handles files, objects, and their associated metadata during your transfer. You also can specify how to verify data integrity, set bandwidth limits for your task, among other options.

Each option has a default value. Unless you need to, you don't have to configure any option before calling StartTaskExecution.

You also can override your task options for each task execution. For example, you might want to adjust the `LogLevel` for an individual execution.

Contents

Atime

Specifies whether to preserve metadata indicating the last time a file was read or written to.

> **Note**
>
> The behavior of `Atime` isn't fully standard across platforms, so DataSync can only do this on a best-effort basis.

- `BEST_EFFORT` (default) - DataSync attempts to preserve the original `Atime` attribute on all source files (that is, the version before the `PREPARING` steps of the task execution). This option is recommended.
- `NONE` - Ignores `Atime`.

> **Note**
>
> The following applies only to Basic mode tasks:
> If `Atime` is set to `BEST_EFFORT`, `Mtime` must be set to `PRESERVE`.
> If `Atime` is set to `NONE`, `Mtime` must also be `NONE`.
> Enhanced mode tasks support configuring `Atime` independently of `Mtime`.

Type: String

Valid Values: NONE | BEST_EFFORT

Required: No

BytesPerSecond

Limits the bandwidth used by a DataSync task. For example, if you want DataSync to use a maximum of 1 MB, set this value to 1048576 (=1024*1024).

Type: Long

Valid Range: Minimum value of -1.

Required: No

Gid

Specifies the POSIX group ID (GID) of the file's owners.

- INT_VALUE (default) - Preserves the integer value of user ID (UID) and GID, which is recommended.
- NONE - Ignores UID and GID.

For more information, see Understanding how DataSync handles file and object metadata.

Type: String

Valid Values: NONE | INT_VALUE | NAME | BOTH

Required: No

LogLevel

Specifies the type of logs that DataSync publishes to a Amazon CloudWatch Logs log group. To specify the log group, see CloudWatchLogGroupArn.

- BASIC - Publishes logs with only basic information (such as transfer errors).
- TRANSFER - Publishes logs for all files or objects that your DataSync task transfers and performs data-integrity checks on.
- OFF - No logs are published.

Type: String

Valid Values: `OFF` | `BASIC` | `TRANSFER`

Required: No

Mtime

Specifies whether to preserve metadata indicating the last time that a file was written to before the `PREPARING` step of your task execution. This option is required when you need to run the a task more than once.

- `PRESERVE` (default) - Preserves original `Mtime`, which is recommended.
- `NONE` - Ignores `Mtime`.

> **Note**
>
> The following applies only to Basic mode tasks:
> If `Mtime` is set to `PRESERVE`, `Atime` must be set to `BEST_EFFORT`.
> If `Mtime` is set to `NONE`, `Atime` must also be set to `NONE`.
> Enhanced mode tasks don't support `Mtime` set to `NONE`.

Type: String

Valid Values: `NONE` | `PRESERVE`

Required: No

ObjectMetadata

Specifies whether you want DataSync to `PRESERVE` object metadata (default behavior) when transferring between object storage systems. If you want your DataSync task to ignore object metadata, specify the `NONE` value.

> **Note**
>
> Even if you specify `NONE`, metadata for the last modified time is still preserved.

Type: String

Valid Values: `PRESERVE` | `NONE`

Required: No

ObjectTags

Specifies whether you want DataSync to PRESERVE object tags (default behavior) when transferring between object storage systems. If you want your DataSync task to ignore object tags, specify the NONE value.

Type: String

Valid Values: PRESERVE | NONE

Required: No

OverwriteMode

Specifies whether DataSync should modify or preserve data at the destination location.

- ALWAYS (default) - DataSync modifies data in the destination location when source data (including metadata) has changed.

  If DataSync overwrites objects, you might incur additional charges for certain Amazon S3 storage classes (for example, for retrieval or early deletion). For more information, see Storage class considerations with Amazon S3 transfers.
- NEVER - DataSync doesn't overwrite data in the destination location even if the source data has changed. You can use this option to protect against overwriting changes made to files or objects in the destination.

Type: String

Valid Values: ALWAYS | NEVER

Required: No

PosixPermissions

Specifies which users or groups can access a file for a specific purpose such as reading, writing, or execution of the file.

For more information, see Understanding how DataSync handles file and object metadata.

- PRESERVE (default) - Preserves POSIX-style permissions, which is recommended.
- NONE - Ignores POSIX-style permissions.

> **Note**
>
> DataSync can preserve extant permissions of a source location.

Type: String

Valid Values: `NONE` | `PRESERVE`

Required: No

PreserveDeletedFiles

Specifies whether files in the destination location that don't exist in the source should be preserved. This option can affect your Amazon S3 storage cost. If your task deletes objects, you might incur minimum storage duration charges for certain storage classes. For detailed information, see Considerations when working with Amazon S3 storage classes in DataSync.

- `PRESERVE` (default) - Ignores such destination files, which is recommended.
- `REMOVE` - Deletes destination files that aren't present in the source.

> **Note**
>
> If you set this parameter to `REMOVE`, you can't set `TransferMode` to `ALL`. When you transfer all data, DataSync doesn't scan your destination location and doesn't know what to delete.

Type: String

Valid Values: `PRESERVE` | `REMOVE`

Required: No

PreserveDevices

Specifies whether DataSync should preserve the metadata of block and character devices in the source location and recreate the files with that device name and metadata on the destination. DataSync copies only the name and metadata of such devices.

> **Note**
>
> DataSync can't copy the actual contents of these devices because they're nonterminal and don't return an end-of-file (EOF) marker.

- `NONE` (default) - Ignores special devices (recommended).
- `PRESERVE` - Preserves character and block device metadata. This option currently isn't supported for Amazon EFS.

Type: String

Valid Values: `NONE` | `PRESERVE`

Required: No

SecurityDescriptorCopyFlags

Specifies which components of the SMB security descriptor are copied from source to destination objects.

This value is only used for transfers between SMB and Amazon FSx for Windows File Server locations or between two FSx for Windows File Server locations. For more information, see Understanding how DataSync handles file and object metadata.

- `OWNER_DACL` (default) - For each copied object, DataSync copies the following metadata:
  - The object owner.
  - NTFS discretionary access control lists (DACLs), which determine whether to grant access to an object.

    DataSync won't copy NTFS system access control lists (SACLs) with this option.
- `OWNER_DACL_SACL` - For each copied object, DataSync copies the following metadata:
  - The object owner.
  - NTFS discretionary access control lists (DACLs), which determine whether to grant access to an object.
  - SACLs, which are used by administrators to log attempts to access a secured object.

    Copying SACLs requires granting additional permissions to the Windows user that DataSync uses to access your SMB location. For information about choosing a user with the right

permissions, see required permissions for SMB, FSx for Windows File Server, or FSx for ONTAP (depending on the type of location in your transfer).

- NONE - None of the SMB security descriptor components are copied. Destination objects are owned by the user that was provided for accessing the destination location. DACLs and SACLs are set based on the destination server's configuration.

Type: String

Valid Values: NONE | OWNER_DACL | OWNER_DACL_SACL

Required: No

TaskQueueing

Specifies whether your transfer tasks should be put into a queue during certain scenarios when running multiple tasks. This is ENABLED by default.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

TransferMode

Specifies whether DataSync transfers only the data (including metadata) that differs between locations following an initial copy or transfers all data every time you run the task. If you're planning on recurring transfers, you might only want to transfer what's changed since your previous task execution.

- CHANGED (default) - After your initial full transfer, DataSync copies only the data and metadata that differs between the source and destination location.
- ALL - DataSync copies everything in the source to the destination without comparing differences between the locations.

Type: String

Valid Values: CHANGED | ALL

Required: No

Uid

Specifies the POSIX user ID (UID) of the file's owner.

- `INT_VALUE` (default) - Preserves the integer value of UID and group ID (GID), which is recommended.
- `NONE` - Ignores UID and GID.

For more information, see Metadata copied by DataSync.

Type: String

Valid Values: `NONE | INT_VALUE | NAME | BOTH`

Required: No

VerifyMode

Specifies if and how DataSync checks the integrity of your data at the end of your transfer.

- `ONLY_FILES_TRANSFERRED` (recommended) - DataSync calculates the checksum of transferred data (including metadata) at the source location. At the end of the transfer, DataSync then compares this checksum to the checksum calculated on that data at the destination.

  > **Note**
  >
  > This is the default option for Enhanced mode tasks.

  We recommend this option when transferring to S3 Glacier Flexible Retrieval or S3 Glacier Deep Archive storage classes. For more information, see Storage class considerations with Amazon S3 locations.
- `POINT_IN_TIME_CONSISTENT` - At the end of the transfer, DataSync checks the entire source and destination to verify that both locations are fully synchronized.

  > **Note**
  >
  > The is the default option for Basic mode tasks and isn't currently supported with Enhanced mode tasks.

  If you use a manifest, DataSync only scans and verifies what's listed in the manifest.

You can't use this option when transferring to S3 Glacier Flexible Retrieval or S3 Glacier Deep Archive storage classes. For more information, see Storage class considerations with Amazon S3 locations.

- NONE - DataSync performs data integrity checks only during your transfer. Unlike other options, there's no additional verification at the end of your transfer.

Type: String

Valid Values: POINT_IN_TIME_CONSISTENT | ONLY_FILES_TRANSFERRED | NONE

Required: No

See Also

For 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

Platform

The platform-related details about the AWS DataSync agent, such as the version number.

Contents

Version

The version of the DataSync agent.

Type: String

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

Pattern: `^[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

PrivateLinkConfig

Specifies how your AWS DataSync agent connects to AWS using a virtual private cloud (VPC) service endpoint. An agent that uses a VPC endpoint isn't accessible over the public internet.

Contents

PrivateLinkEndpoint

Specifies the VPC endpoint provided by AWS PrivateLink that your agent connects to.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 15.

Pattern: `\A(25[0-5]|2[0-4]\d|[0-1]?\d?\d)(\.(25[0-5]|2[0-4]\d|[0-1]?\d?\d)){3}\z`

Required: No

SecurityGroupArns

Specifies the Amazon Resource Names (ARN) of the security group that provides DataSync access to your VPC endpoint. You can only specify one ARN.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:security-group/sg-[a-f0-9]+$`

Required: No

SubnetArns

Specifies the ARN of the subnet where DataSync creates the network interfaces that handle data transfer traffic for your tasks. You can only specify one ARN.

The subnet doesn't have to be the subnet that contains your VPC endpoint.

Type: Array of strings

Array Members: Fixed number of 1 item.

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):ec2:[a-z\-0-9]*:[0-9]{12}:subnet/subnet-[a-f0-9]+$`

Required: No

VpcEndpointId

Specifies the ID of the VPC service endpoint that's recorded for your agent. The endpoint ID is informational and isn't verified by DataSync. Your agent communicates through the private IP address in `PrivateLinkEndpoint`, which is set when you activate the agent.

Type: String

Pattern: `^vpce-[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

QopConfiguration

The Quality of Protection (QOP) configuration specifies the Remote Procedure Call (RPC) and data transfer privacy settings configured on the Hadoop Distributed File System (HDFS) cluster.

Contents

DataTransferProtection

The data transfer protection setting configured on the HDFS cluster. This setting corresponds to your `dfs.data.transfer.protection` setting in the `hdfs-site.xml` file on your Hadoop cluster.

Type: String

Valid Values: `DISABLED | AUTHENTICATION | INTEGRITY | PRIVACY`

Required: No

RpcProtection

The RPC protection setting configured on the HDFS cluster. This setting corresponds to your `hadoop.rpc.protection` setting in your `core-site.xml` file on your Hadoop cluster.

Type: String

Valid Values: `DISABLED | AUTHENTICATION | INTEGRITY | PRIVACY`

Required: No

See Also

For 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

ReportDestination

Specifies where DataSync uploads your task report.

Contents

S3

Specifies the Amazon S3 bucket where DataSync uploads your task report.

Type: ReportDestinationS3 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

ReportDestinationS3

Specifies the Amazon S3 bucket where DataSync uploads your task report.

Contents

BucketAccessRoleArn

Specifies the Amazon Resource Name (ARN) of the IAM policy that allows DataSync to upload a task report to your S3 bucket. For more information, see Allowing DataSync to upload a task report to an Amazon S3 bucket.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$`

Required: Yes

S3BucketArn

Specifies the ARN of the S3 bucket where DataSync uploads your report.

Type: String

Length Constraints: Maximum length of 268.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:[a-z\-0-9]*:[0-9]{12}:accesspoint[/:][a-zA-Z0-9\-.]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3-outposts:[a-z\-0-9]+:[0-9]{12}:outpost[/:][a-zA-Z0-9\-]{1,63}[/:]accesspoint[/:][a-zA-Z0-9\-]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:::[a-zA-Z0-9.\-_]{1,255}$`

Required: Yes

Subdirectory

Specifies a bucket prefix for your report.

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

Required: No

See Also

For 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

ReportOverride

Specifies the level of detail for a particular aspect of your DataSync task report.

Contents

ReportLevel

Specifies whether your task report includes errors only or successes and errors.

For example, your report might mostly include only what didn't go well in your transfer (`ERRORS_ONLY`). At the same time, you want to verify that your task filter is working correctly. In this situation, you can get a list of what files DataSync successfully skipped and if something transferred that you didn't to transfer (`SUCCESSES_AND_ERRORS`).

Type: String

Valid Values: `ERRORS_ONLY` | `SUCCESSES_AND_ERRORS`

Required: No

See Also

For 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

ReportOverrides

The level of detail included in each aspect of your DataSync task report.

Contents

Deleted

Specifies the level of reporting for the files, objects, and directories that DataSync attempted to delete in your destination location. This only applies if you configure your task to delete data in the destination that isn't in the source.

Type: ReportOverride object

Required: No

Skipped

Specifies the level of reporting for the files, objects, and directories that DataSync attempted to skip during your transfer.

Type: ReportOverride object

Required: No

Transferred

Specifies the level of reporting for the files, objects, and directories that DataSync attempted to transfer.

Type: ReportOverride object

Required: No

Verified

Specifies the level of reporting for the files, objects, and directories that DataSync attempted to verify at the end of your transfer.

Type: ReportOverride 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

ReportResult

Indicates whether DataSync created a complete task report for your transfer.

Contents

ErrorCode

Indicates the code associated with the error if DataSync can't create a complete report.

Type: String

Required: No

ErrorDetail

Provides details about issues creating a report.

Type: String

Required: No

Status

Indicates whether DataSync is still working on your report, created a report, or can't create a complete report.

Type: String

Valid Values: `PENDING | SUCCESS | ERROR`

Required: No

See Also

For 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

S3Config

Specifies the Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that DataSync uses to access your S3 bucket.

For more information, see Providing DataSync access to S3 buckets.

Contents

BucketAccessRoleArn

Specifies the ARN of the IAM role that DataSync uses to access your S3 bucket.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$`

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

S3ManifestConfig

Specifies the S3 bucket where you're hosting the manifest that you want AWS DataSync to use. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

Contents

BucketAccessRoleArn

Specifies the AWS Identity and Access Management (IAM) role that allows DataSync to access your manifest. For more information, see Providing DataSync access to your manifest.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):iam::[0-9]{12}:role/.*$`

Required: Yes

ManifestObjectPath

Specifies the Amazon S3 object key of your manifest. This can include a prefix (for example, `prefix/my-manifest.csv`).

Type: String

Length Constraints: Maximum length of 4096.

Pattern: `^[a-zA-Z0-9_\-\+\./\(\)\p{Zs}]*$`

Required: Yes

S3BucketArn

Specifies the Amazon Resource Name (ARN) of the S3 bucket where you're hosting your manifest.

Type: String

Length Constraints: Maximum length of 268.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:[a-z\-0-9]*:[0-9]{12}:accesspoint[/:][a-zA-Z0-9\-.]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3-outposts:[a-z\-0-9]+:[0-9]{12}:outpost[/:][a-zA-Z0-9\-]{1,63}[/:]accesspoint[/:][a-zA-Z0-9\-]{1,63}$|^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):s3:::[a-zA-Z0-9.\-_]{1,255}$`

Required: Yes

ManifestObjectVersionId

Specifies the object version ID of the manifest that you want DataSync to use. If you don't set this, DataSync uses the latest version of the object.

Type: String

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

Pattern: `^.+$`

Required: No

See Also

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

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

SmbMountOptions

Specifies the version of the Server Message Block (SMB) protocol that AWS DataSync uses to access an SMB file server.

Contents

Version

By default, DataSync automatically chooses an SMB protocol version based on negotiation with your SMB file server. You also can configure DataSync to use a specific SMB version, but we recommend doing this only if DataSync has trouble negotiating with the SMB file server automatically.

These are the following options for configuring the SMB version:

- `AUTOMATIC` (default): DataSync and the SMB file server negotiate the highest version of SMB that they mutually support between 2.1 and 3.1.1.

  This is the recommended option. If you instead choose a specific version that your file server doesn't support, you may get an `Operation Not Supported` error.
- `SMB3`: Restricts the protocol negotiation to only SMB version 3.0.2.
- `SMB2`: Restricts the protocol negotiation to only SMB version 2.1.
- `SMB2_0`: Restricts the protocol negotiation to only SMB version 2.0.
- `SMB1`: Restricts the protocol negotiation to only SMB version 1.0.

> **Note**
>
> The `SMB1` option isn't available when creating an Amazon FSx for NetApp ONTAP location.

Type: String

Valid Values: `AUTOMATIC | SMB2 | SMB3 | SMB1 | SMB2_0`

Required: No

See Also

For 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

SourceManifestConfig

Specifies the manifest that you want AWS DataSync to use and where it's hosted. For more information and configuration examples, see Specifying what DataSync transfers by using a manifest.

Contents

S3

Specifies the S3 bucket where you're hosting your manifest.

Type: S3ManifestConfig object

Required: Yes

See Also

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

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

TagListEntry

A key-value pair representing a single tag that's been applied to an AWS resource.

Contents

Key

The key for an AWS resource tag.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:/-]+$`

Required: Yes

Value

The value for an AWS resource tag.

Type: String

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

Pattern: `^[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

TaskExecutionFilesFailedDetail

The number of files or objects that DataSync fails to prepare, transfer, verify, and delete during your task execution.

> **Note**
>
> Applies only to Enhanced mode tasks.

Contents

Delete

The number of files or objects that DataSync fails to delete during your task execution.

Type: Long

Required: No

Prepare

The number of files or objects that DataSync fails to prepare during your task execution.

Type: Long

Required: No

Transfer

The number of files or objects that DataSync fails to transfer during your task execution.

Type: Long

Required: No

Verify

The number of files or objects that DataSync fails to verify during your task execution.

Type: Long

Required: No

See Also

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

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

TaskExecutionFilesListedDetail

The number of files or objects that DataSync finds at your locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

Contents

AtDestinationForDelete

The number of files or objects that DataSync finds at your destination location. This counter is only applicable if you configure your task to delete data in the destination that isn't in the source.

Type: Long

Required: No

AtSource

The number of files or objects that DataSync finds at your source location.

- With a manifest, DataSync lists only what's in your manifest (and not everything at your source location).
- With an include filter, DataSync lists only what matches the filter at your source location.
- With an exclude filter, DataSync lists everything at your source location before applying the filter.

Type: Long

Required: No

See Also

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

- AWS SDK for C++

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

TaskExecutionFoldersFailedDetail

The number of directories that DataSync fails to list, prepare, transfer, verify, and delete during your task execution.

> **Note**
>
> Applies only to Enhanced mode tasks.

Contents

Delete

The number of directories that DataSync fails to delete during your task execution.

Type: Long

Required: No

List

The number of directories that DataSync fails to list during your task execution.

Type: Long

Required: No

Prepare

The number of directories that DataSync fails to prepare during your task execution.

Type: Long

Required: No

Transfer

The number of directories that DataSync fails to transfer during your task execution.

Type: Long

Required: No

Verify

The number of directories that DataSync fails to verify during your task execution.

Type: Long

Required: No

See Also

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

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

TaskExecutionFoldersListedDetail

The number of directories that DataSync finds at your locations.

> **Note**
>
> Applies only to Enhanced mode tasks.

Contents

AtDestinationForDelete

The number of directories that DataSync finds at your destination location. This counter is only applicable if you configure your task to delete data in the destination that isn't in the source.

Type: Long

Required: No

AtSource

The number of directories that DataSync finds at your source location.

- With a manifest, DataSync lists only what's in your manifest (and not everything at your source location).
- With an include filter, DataSync lists only what matches the filter at your source location.
- With an exclude filter, DataSync lists everything at your source location before applying the filter.

Type: Long

Required: No

See Also

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

- AWS SDK for C++

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

TaskExecutionListEntry

Represents a single entry in a list of AWS DataSync task executions that's returned with the ListTaskExecutions operation.

Contents

Status

The status of a task execution. For more information, see Task execution statuses.

Type: String

Valid Values: `QUEUED | CANCELLING | LAUNCHING | PREPARING | TRANSFERRING | VERIFYING | SUCCESS | ERROR`

Required: No

TaskExecutionArn

The Amazon Resource Name (ARN) of a task execution.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}/execution/exec-[0-9a-f]{17}$`

Required: No

TaskMode

The task mode that you're using. For more information, see Choosing a task mode for your data transfer.

Type: String

Valid Values: `BASIC | ENHANCED`

Required: No

See Also

For 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

TaskExecutionResultDetail

Provides detailed information about the result of your AWS DataSync task execution.

Contents

ErrorCode

An error that DataSync encountered during your task execution. You can use this information to help troubleshoot issues.

Type: String

Required: No

ErrorDetail

The detailed description of an error that DataSync encountered during your task execution. You can use this information to help troubleshoot issues.

Type: String

Required: No

PrepareDuration

The time in milliseconds that your task execution was in the `PREPARING` step. For more information, see Task execution statuses.

For Enhanced mode tasks, the value is always `0`. For more information, see How DataSync prepares your data transfer.

Type: Long

Valid Range: Minimum value of 0.

Required: No

PrepareStatus

The status of the `PREPARING` step for your task execution. For more information, see Task execution statuses.

Type: String

Valid Values: `PENDING | SUCCESS | ERROR`

Required: No

TotalDuration

The time in milliseconds that your task execution ran.

Type: Long

Valid Range: Minimum value of 0.

Required: No

TransferDuration

The time in milliseconds that your task execution was in the `TRANSFERRING` step. For more information, see Task execution statuses.

For Enhanced mode tasks, the value is always `0`. For more information, see How DataSync transfers your data.

Type: Long

Valid Range: Minimum value of 0.

Required: No

TransferStatus

The status of the `TRANSFERRING` step for your task execution. For more information, see Task execution statuses.

Type: String

Valid Values: `PENDING | SUCCESS | ERROR`

Required: No

VerifyDuration

The time in milliseconds that your task execution was in the `VERIFYING` step. For more information, see Task execution statuses.

For Enhanced mode tasks, the value is always `0`. For more information, see How DataSync verifies your data's integrity.

Type: Long

Valid Range: Minimum value of 0.

Required: No

VerifyStatus

The status of the `VERIFYING` step for your task execution. For more information, see Task execution statuses.

Type: String

Valid Values: `PENDING | SUCCESS | ERROR`

Required: No

See Also

For 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

TaskFilter

You can use API filters to narrow down the list of resources returned by `ListTasks`. For example, to retrieve all tasks on a source location, you can use `ListTasks` with filter name `LocationId` and `Operator Equals` with the ARN for the location.

For more information, see filtering DataSync resources.

Contents

Name

The name of the filter being used. Each API call supports a list of filters that are available for it. For example, `LocationId` for `ListTasks`.

Type: String

Valid Values: `LocationId | CreationTime`

Required: Yes

Operator

The operator that is used to compare filter values (for example, `Equals` or `Contains`).

Type: String

Valid Values: `Equals | NotEquals | In | LessThanOrEqual | LessThan | GreaterThanOrEqual | GreaterThan | Contains | NotContains | BeginsWith`

Required: Yes

Values

The values that you want to filter for. For example, you might want to display only tasks for a specific destination location.

Type: Array of strings

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

Pattern: `^[0-9a-zA-Z_\ \-\:\*\.\\/\?-]*$`

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

TaskListEntry

Represents a single entry in a list of tasks. `TaskListEntry` returns an array that contains a list of tasks when the ListTasks operation is called. A task includes the source and destination file systems to sync and the options to use for the tasks.

Contents

Name

The name of the task.

Type: String

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

Pattern: `^[a-zA-Z0-9\s+=._:@/-]+$`

Required: No

Status

The status of the task.

Type: String

Valid Values: `AVAILABLE | CREATING | QUEUED | RUNNING | UNAVAILABLE`

Required: No

TaskArn

The Amazon Resource Name (ARN) of the task.

Type: String

Length Constraints: Maximum length of 128.

Pattern: `^arn:(aws|aws-cn|aws-us-gov|aws-eusc|aws-iso|aws-iso-b):datasync:[a-z\-0-9]+:[0-9]{12}:task/task-[0-9a-f]{17}$`

Required: No

TaskMode

The task mode that you're using. For more information, see Choosing a task mode for your data transfer.

Type: String

Valid Values: `BASIC | ENHANCED`

Required: No

See Also

For 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

TaskReportConfig

Specifies how you want to configure a task report, which provides detailed information about for your AWS DataSync transfer.

For more information, see Task reports.

Contents

Destination

Specifies the Amazon S3 bucket where DataSync uploads your task report. For more information, see Task reports.

Type: ReportDestination object

Required: No

ObjectVersionIds

Specifies whether your task report includes the new version of each object transferred into an S3 bucket. This only applies if you enable versioning on your bucket. Keep in mind that setting this to `INCLUDE` can increase the duration of your task execution.

Type: String

Valid Values: `INCLUDE | NONE`

Required: No

OutputType

Specifies the type of task report that you want:

- `SUMMARY_ONLY`: Provides necessary details about your task, including the number of files, objects, and directories transferred and transfer duration.
- `STANDARD`: Provides complete details about your task, including a full list of files, objects, and directories that were transferred, skipped, verified, and more.

Type: String

Valid Values: `SUMMARY_ONLY | STANDARD`

Required: No

Overrides

Customizes the reporting level for aspects of your task report. For example, your report might generally only include errors, but you could specify that you want a list of successes and errors just for the files that DataSync attempted to delete in your destination location.

Type: ReportOverrides object

Required: No

ReportLevel

Specifies whether you want your task report to include only what went wrong with your transfer or a list of what succeeded and didn't.

- `ERRORS_ONLY`: A report shows what DataSync was unable to transfer, skip, verify, and delete.
- `SUCCESSES_AND_ERRORS`: A report shows what DataSync was able and unable to transfer, skip, verify, and delete.

Type: String

Valid Values: `ERRORS_ONLY | SUCCESSES_AND_ERRORS`

Required: No

See Also

For 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

TaskSchedule

Configures your AWS DataSync task to run on a schedule (at a minimum interval of 1 hour).

Contents

ScheduleExpression

Specifies your task schedule by using a cron or rate expression.

Use cron expressions for task schedules that run on a specific time and day. For example, the following cron expression creates a task schedule that runs at 8 AM on the first Wednesday of every month:

`cron(0 8 * * 3#1)`

Use rate expressions for task schedules that run on a regular interval. For example, the following rate expression creates a task schedule that runs every 12 hours:

`rate(12 hours)`

For information about cron and rate expression syntax, see the *Amazon EventBridge User Guide*.

Type: String

Length Constraints: Maximum length of 256.

Pattern: `^[a-zA-Z0-9\ \_\*\?\,\|\^\-\/\#\s\(\)\+]*$`

Required: Yes

Status

Specifies whether to enable or disable your task schedule. Your schedule is enabled by default, but there can be situations where you need to disable it. For example, you might need to pause a recurring transfer to fix an issue with your task or perform maintenance on your storage system.

DataSync might disable your schedule automatically if your task fails repeatedly with the same error. For more information, see TaskScheduleDetails.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

See Also

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

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

TaskScheduleDetails

Provides information about your AWS DataSync task schedule.

Contents

DisabledBy

Indicates how your task schedule was disabled.

- `USER` - Your schedule was manually disabled by using the UpdateTask operation or DataSync console.
- `SERVICE` - Your schedule was automatically disabled by DataSync because the task failed repeatedly with the same error.

Type: String

Valid Values: `USER | SERVICE`

Required: No

DisabledReason

Provides a reason if the task schedule is disabled.

If your schedule is disabled by `USER`, you see a `Manually disabled by user.` message.

If your schedule is disabled by `SERVICE`, you see an error message to help you understand why the task keeps failing. For information on resolving DataSync errors, see Troubleshooting issues with DataSync transfers.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `^[\w\s.,'?!:;\/=|<>()-]*$`

Required: No

StatusUpdateTime

Indicates the last time the status of your task schedule changed. For example, if DataSync automatically disables your schedule because of a repeated error, you can see when the schedule was disabled.

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

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common 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