aws

API Reference

Amazon Data Lifecycle Manager

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Amazon Data Lifecycle Manager: API Reference

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Welcome

With Amazon Data Lifecycle Manager, you can manage the lifecycle of your AWS resources. You create lifecycle policies, which are used to automate operations on the specified resources.

Amazon Data Lifecycle Manager supports Amazon EBS volumes and snapshots. For information about using Amazon Data Lifecycle Manager with Amazon EBS, see Amazon Data Lifecycle Manager in the *Amazon EC2 User Guide*.

This document was last published on April 10, 2026.

Actions

The following actions are supported:

- CreateLifecyclePolicy
- DeleteLifecyclePolicy
- GetLifecyclePolicies
- GetLifecyclePolicy
- ListTagsForResource
- TagResource
- UntagResource
- UpdateLifecyclePolicy

CreateLifecyclePolicy

Creates an Amazon Data Lifecycle Manager lifecycle policy. Amazon Data Lifecycle Manager supports the following policy types:

- Custom EBS snapshot policy
- Custom EBS-backed AMI policy
- Cross-account copy event policy
- Default policy for EBS snapshots
- Default policy for EBS-backed AMIs

For more information, see Default policies vs custom policies.

Important

If you create a default policy, you can specify the request parameters either in the request body, or in the PolicyDetails request structure, but not both.

Request Syntax

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

{
   "CopyTags": boolean,
   "CreateInterval": number,
   "CrossRegionCopyTargets": [
      {
         "TargetRegion": "string"
      }
   ],
   "DefaultPolicy": "string",
   "Description": "string",
   "Exclusions": {
      "ExcludeBootVolumes": boolean,
      "ExcludeTags": [
         {
            "Key": "string",
```

```
            "Value": "string"
         }
      ],
      "ExcludeVolumeTypes": [ "string" ]
   },
   "ExecutionRoleArn": "string",
   "ExtendDeletion": boolean,
   "PolicyDetails": {
      "Actions": [
         {
            "CrossRegionCopy": [
               {
                  "EncryptionConfiguration": {
                     "CmkArn": "string",
                     "Encrypted": boolean
                  },
                  "RetainRule": {
                     "Interval": number,
                     "IntervalUnit": "string"
                  },
                  "Target": "string"
               }
            ],
            "Name": "string"
         }
      ],
      "CopyTags": boolean,
      "CreateInterval": number,
      "CrossRegionCopyTargets": [
         {
            "TargetRegion": "string"
         }
      ],
      "EventSource": {
         "Parameters": {
            "DescriptionRegex": "string",
            "EventType": "string",
            "SnapshotOwner": [ "string" ]
         },
         "Type": "string"
      },
      "Exclusions": {
         "ExcludeBootVolumes": boolean,
         "ExcludeTags": [
```

```
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "ExcludeVolumeTypes": [ "string" ]
      },
      "ExtendDeletion": boolean,
      "Parameters": {
         "ExcludeBootVolume": boolean,
         "ExcludeDataVolumeTags": [
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "NoReboot": boolean
      },
      "PolicyLanguage": "string",
      "PolicyType": "string",
      "ResourceLocations": [ "string" ],
      "ResourceType": "string",
      "ResourceTypes": [ "string" ],
      "RetainInterval": number,
      "Schedules": [
         {
            "ArchiveRule": {
               "RetainRule": {
                  "RetentionArchiveTier": {
                     "Count": number,
                     "Interval": number,
                     "IntervalUnit": "string"
                  }
               }
            },
            "CopyTags": boolean,
            "CreateRule": {
               "CronExpression": "string",
               "Interval": number,
               "IntervalUnit": "string",
               "Location": "string",
               "Scripts": [
                  {
                     "ExecuteOperationOnScriptFailure": boolean,
```

```
                    "ExecutionHandler": "string",
                    "ExecutionHandlerService": "string",
                    "ExecutionTimeout": number,
                    "MaximumRetryCount": number,
                    "Stages": [ "string" ]
                 }
              ],
              "Times": [ "string" ]
           },
           "CrossRegionCopyRules": [
              {
                 "CmkArn": "string",
                 "CopyTags": boolean,
                 "DeprecateRule": {
                    "Interval": number,
                    "IntervalUnit": "string"
                 },
                 "Encrypted": boolean,
                 "RetainRule": {
                    "Interval": number,
                    "IntervalUnit": "string"
                 },
                 "Target": "string",
                 "TargetRegion": "string"
              }
           ],
           "DeprecateRule": {
              "Count": number,
              "Interval": number,
              "IntervalUnit": "string"
           },
           "FastRestoreRule": {
              "AvailabilityZoneIds": [ "string" ],
              "AvailabilityZones": [ "string" ],
              "Count": number,
              "Interval": number,
              "IntervalUnit": "string"
           },
           "Name": "string",
           "RetainRule": {
              "Count": number,
              "Interval": number,
              "IntervalUnit": "string"
           },
```

```
            "ShareRules": [
               {
                  "TargetAccounts": [ "string" ],
                  "UnshareInterval": number,
                  "UnshareIntervalUnit": "string"
               }
            ],
            "TagsToAdd": [
               {
                  "Key": "string",
                  "Value": "string"
               }
            ],
            "VariableTags": [
               {
                  "Key": "string",
                  "Value": "string"
               }
            ]
         }
      ],
      "TargetTags": [
         {
            "Key": "string",
            "Value": "string"
         }
      ]
   },
   "RetainInterval": number,
   "State": "string",
   "Tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

CopyTags

[Default policies only] Indicates whether the policy should copy tags from the source resource to the snapshot or AMI. If you do not specify a value, the default is `false`.

Default: false

Type: Boolean

Required: No

CreateInterval

[Default policies only] Specifies how often the policy should run and create snapshots or AMIs. The creation frequency can range from 1 to 7 days. If you do not specify a value, the default is 1.

Default: 1

Type: Integer

Valid Range: Minimum value of 1.

Required: No

CrossRegionCopyTargets

[Default policies only] Specifies destination Regions for snapshot or AMI copies. You can specify up to 3 destination Regions. If you do not want to create cross-Region copies, omit this parameter.

Type: Array of CrossRegionCopyTarget objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

DefaultPolicy

[Default policies only] Specify the type of default policy to create.

- To create a default policy for EBS snapshots, that creates snapshots of all volumes in the Region that do not have recent backups, specify `VOLUME`.
- To create a default policy for EBS-backed AMIs, that creates EBS-backed AMIs from all instances in the Region that do not have recent backups, specify `INSTANCE`.

Type: String

Valid Values: `VOLUME | INSTANCE`

Required: No

Description

A description of the lifecycle policy. The characters ^[0-9A-Za-z _-]+$ are supported.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

Required: Yes

Exclusions

[Default policies only] Specifies exclusion parameters for volumes or instances for which you do not want to create snapshots or AMIs. The policy will not create snapshots or AMIs for target resources that match any of the specified exclusion parameters.

Type: Exclusions object

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the IAM role used to run the operations specified by the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `arn:aws(-[a-z]{1,4}){0,2}:iam::\d+:role/.*`

Required: Yes

ExtendDeletion

[Default policies only] Defines the snapshot or AMI retention behavior for the policy if the source volume or instance is deleted, or if the policy enters the error, disabled, or deleted state.

By default (**ExtendDeletion=false**):

- If a source resource is deleted, Amazon Data Lifecycle Manager will continue to delete previously created snapshots or AMIs, up to but not including the last one, based on the specified retention period. If you want Amazon Data Lifecycle Manager to delete all snapshots or AMIs, including the last one, specify `true`.
- If a policy enters the error, disabled, or deleted state, Amazon Data Lifecycle Manager stops deleting snapshots and AMIs. If you want Amazon Data Lifecycle Manager to continue deleting snapshots or AMIs, including the last one, if the policy enters one of these states, specify `true`.

If you enable extended deletion (**ExtendDeletion=true**), you override both default behaviors simultaneously.

If you do not specify a value, the default is `false`.

Default: false

Type: Boolean

Required: No

PolicyDetails

The configuration details of the lifecycle policy.

> **Important**
>
> If you create a default policy, you can specify the request parameters either in the request body, or in the PolicyDetails request structure, but not both.

Type: PolicyDetails object

Required: No

RetainInterval

[Default policies only] Specifies how long the policy should retain snapshots or AMIs before deleting them. The retention period can range from 2 to 14 days, but it must be greater than the creation frequency to ensure that the policy retains at least 1 snapshot or AMI at any given time. If you do not specify a value, the default is 7.

Default: 7

Type: Integer

Valid Range: Minimum value of 1.

Required: No

State

The activation state of the lifecycle policy after creation.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

Tags

The tags to apply to the lifecycle policy during creation.

Type: String to string map

Map Entries: Maximum number of 200 items.

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

Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\p{all}]*`

Required: No

Response Syntax

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

{
   "PolicyId": "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.

PolicyId

The identifier of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

Examples

Example 1: Default policy for EBS snapshots

The following example creates a default policy for EBS snapshots that uses the default IAM role for managing EBS snapshots. The policy creates snapshots daily, retains snapshots for 3 days, and excludes `st1` volumes, boot volumes, and volumes tagged with `purpose=testing`.

Sample Request

```
POST /policies HTTP/1.1
Content-type: application/json
{
   "CopyTags": true,
   "CreateInterval": 1,
   "CrossRegionCopyTargets": [
      {
         "TargetRegion": "us-east-1"
      }
   ],
   "DefaultPolicy": "VOLUME",
   "Description": "Daily default snapshot policy",
   "Exclusions": {
      "ExcludeBootVolumes": true,
      "ExcludeTags": [
         {
            "Key": "purpose",
            "Value": "testing"
         }
      ],
      "ExcludeVolumeTypes": [ "st1" ]
   },
   "ExecutionRoleArn": "arn:aws:iam::123456789012:role/
AWSDataLifecycleManagerDefaultRole",
   "ExtendDeletion": true,
   "RetainInterval": 3,
   "State": "ENABLED",
   "Tags": {
      "environment" : "prod"
   }
```

```
}
```

Example 2: Default policy for EBS snapshots with default settings

The example creates a default EBS snapshots policy using the default settings. The policy uses the default role for managing EBS snapshots, creates snapshots daily, and retains snapshots for 7 days.

Sample Request

```
POST /policies HTTP/1.1
Content-type: application/json
{
   "DefaultPolicy": "VOLUME",
   "Description": "Daily default snapshot policy",
   "ExecutionRoleArn": "arn:aws:iam::123456789012:role/
AWSDataLifecycleManagerDefaultRole",
   "State": "ENABLED"
}
```

Example 3: Custom EBS-backed AMI policy

The following example creates a custom age-based EBS-backed AMI policy that targets instances tagged with `environment=prod`, but excludes volumes attached as boot volumes. The policy uses the default IAM role for managing EBS-backed AMIs. It creates AMIs every 12 hours, starting at 17:00 UTC, retains AMIs for 7 days, and deprecates the oldest AMI after 2 days. The policy also copies encrypted AMIs to the `us-east-1` Region, and retains those copies for 2 days.

Sample Request

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

{
   "Description": "Custom AMI policy",
   "ExecutionRoleArn": "arn:aws:iam::12345678910:role/
AWSDataLifecycleManagerDefaultRoleForAMIManagement",
   "PolicyDetails": {
      "Parameters": {
         "ExcludeBootVolume": false,
         "NoReboot": false
      },
      "PolicyType": "IMAGE_MANAGEMENT",
```

```
      "ResourceTypes": [ "INSTANCE" ],
      "Schedules": [
         {
            "CopyTags": true,
            "CreateRule": {
               "Interval": 12,
               "IntervalUnit": "HOURS",
               "Times": [ "17:30" ]
            },
            "CrossRegionCopyRules": [
               {
                  "CopyTags": true,
                  "Encrypted": true,
                  "RetainRule": {
                     "Interval": 2,
                     "IntervalUnit": "DAYS"
                  },
                  "Target": "us-east-1"
               }
            ],
            "DeprecateRule": {
               "Interval": 2,
               "IntervalUnit": "DAYS"
            },
            "Name": "Schedule1",
            "RetainRule": {
               "Interval": 7,
               "IntervalUnit": "DAYS"
            }
         }
      ],
      "TargetTags": [
         {
            "Key": "environment",
            "Value": "prod"
         }
      ]
   },
   "State": "ENABLED"
}
```

See Also

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

- AWS Command Line Interface V2
- AWS SDK for .NET V4
- AWS SDK for C++
- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for Kotlin
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

DeleteLifecyclePolicy

Deletes the specified lifecycle policy and halts the automated operations that the policy specified.

For more information about deleting a policy, see Delete lifecycle policies.

Request Syntax

```
DELETE /policies/policyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

policyId

The identifier of the lifecycle policy.

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

GetLifecyclePolicies

Gets summary information about all or the specified data lifecycle policies.

To get complete information about a policy, use GetLifecyclePolicy.

Request Syntax

```
GET /policies?
defaultPolicyType=DefaultPolicyType&policyIds=PolicyIds&resourceTypes=ResourceTypes&state=State
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

DefaultPolicyType

[Default policies only] Specifies the type of default policy to get. Specify one of the following:

- VOLUME - To get only the default policy for EBS snapshots
- INSTANCE - To get only the default policy for EBS-backed AMIs
- ALL - To get all default policies

Valid Values: VOLUME | INSTANCE | ALL

PolicyIds

The identifiers of the data lifecycle policies.

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: policy-[a-f0-9]+

ResourceTypes

The resource type.

Array Members: Fixed number of 1 item.

Valid Values: VOLUME | INSTANCE

State

The activation state.

Valid Values: `ENABLED | DISABLED | ERROR`

TagsToAdd

The tags to add to objects created by the policy.

Tags are strings in the format `key=value`.

These user-defined tags are added in addition to the AWS-added lifecycle tags.

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

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

Pattern: `[\p{all}]*`

TargetTags

The target tag for a policy.

Tags are strings in the format `key=value`.

Array Members: Minimum number of 1 item. Maximum number of 50 items.

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

Pattern: `[\p{all}]*`

Request Body

The request does not have a request body.

Response Syntax

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

{
```

```
   "Policies": [
      {
         "DefaultPolicy": boolean,
         "Description": "string",
         "PolicyId": "string",
         "PolicyType": "string",
         "State": "string",
         "Tags": {
            "string" : "string"
         }
      }
   ]
}
```

Response Elements

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

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

Policies

Summary information about the lifecycle policies.

Type: Array of LifecyclePolicySummary objects

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

GetLifecyclePolicy

Gets detailed information about the specified lifecycle policy.

Request Syntax

```
GET /policies/policyId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

policyId

The identifier of the lifecycle policy.

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Policy": {
      "DateCreated": "string",
      "DateModified": "string",
      "DefaultPolicy": boolean,
      "Description": "string",
      "ExecutionRoleArn": "string",
      "PolicyArn": "string",
      "PolicyDetails": {
         "Actions": [
            {
```

```
            "CrossRegionCopy": [
               {
                  "EncryptionConfiguration": {
                     "CmkArn": "string",
                     "Encrypted": boolean
                  },
                  "RetainRule": {
                     "Interval": number,
                     "IntervalUnit": "string"
                  },
                  "Target": "string"
               }
            ],
            "Name": "string"
         }
      ],
      "CopyTags": boolean,
      "CreateInterval": number,
      "CrossRegionCopyTargets": [
         {
            "TargetRegion": "string"
         }
      ],
      "EventSource": {
         "Parameters": {
            "DescriptionRegex": "string",
            "EventType": "string",
            "SnapshotOwner": [ "string" ]
         },
         "Type": "string"
      },
      "Exclusions": {
         "ExcludeBootVolumes": boolean,
         "ExcludeTags": [
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "ExcludeVolumeTypes": [ "string" ]
      },
      "ExtendDeletion": boolean,
      "Parameters": {
         "ExcludeBootVolume": boolean,
```

```
            "ExcludeDataVolumeTags": [
               {
                  "Key": "string",
                  "Value": "string"
               }
            ],
            "NoReboot": boolean
         },
         "PolicyLanguage": "string",
         "PolicyType": "string",
         "ResourceLocations": [ "string" ],
         "ResourceType": "string",
         "ResourceTypes": [ "string" ],
         "RetainInterval": number,
         "Schedules": [
            {
               "ArchiveRule": {
                  "RetainRule": {
                     "RetentionArchiveTier": {
                        "Count": number,
                        "Interval": number,
                        "IntervalUnit": "string"
                     }
                  }
               },
               "CopyTags": boolean,
               "CreateRule": {
                  "CronExpression": "string",
                  "Interval": number,
                  "IntervalUnit": "string",
                  "Location": "string",
                  "Scripts": [
                     {
                        "ExecuteOperationOnScriptFailure": boolean,
                        "ExecutionHandler": "string",
                        "ExecutionHandlerService": "string",
                        "ExecutionTimeout": number,
                        "MaximumRetryCount": number,
                        "Stages": [ "string" ]
                     }
                  ],
                  "Times": [ "string" ]
               },
               "CrossRegionCopyRules": [
```

```
            {
               "CmkArn": "string",
               "CopyTags": boolean,
               "DeprecateRule": {
                  "Interval": number,
                  "IntervalUnit": "string"
               },
               "Encrypted": boolean,
               "RetainRule": {
                  "Interval": number,
                  "IntervalUnit": "string"
               },
               "Target": "string",
               "TargetRegion": "string"
            }
         ],
         "DeprecateRule": {
            "Count": number,
            "Interval": number,
            "IntervalUnit": "string"
         },
         "FastRestoreRule": {
            "AvailabilityZoneIds": [ "string" ],
            "AvailabilityZones": [ "string" ],
            "Count": number,
            "Interval": number,
            "IntervalUnit": "string"
         },
         "Name": "string",
         "RetainRule": {
            "Count": number,
            "Interval": number,
            "IntervalUnit": "string"
         },
         "ShareRules": [
            {
               "TargetAccounts": [ "string" ],
               "UnshareInterval": number,
               "UnshareIntervalUnit": "string"
            }
         ],
         "TagsToAdd": [
            {
               "Key": "string",
```

```
                    "Value": "string"
                 }
              ],
              "VariableTags": [
                 {
                    "Key": "string",
                    "Value": "string"
                 }
              ]
           }
        ],
        "TargetTags": [
           {
              "Key": "string",
              "Value": "string"
           }
        ]
     },
     "PolicyId": "string",
     "State": "string",
     "StatusMessage": "string",
     "Tags": {
        "string" : "string"
     }
  }
}
```

Response Elements

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

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

Policy

Detailed information about the lifecycle policy.

Type: LifecyclePolicy object

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

ListTagsForResource

Lists the tags for the specified resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource.

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^arn:aws(-[a-z]{1,4}){0,2}:dlm:[A-Za-z0-9_/.-]{0,63}:\d+:policy/[0-9A-Za-z_-]{1,128}$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Tags": {
      "string" : "string"
   }
}
```

Response Elements

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

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

Tags

Information about the tags.

Type: String to string map

Map Entries: Maximum number of 200 items.

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

Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\p{all}]*`

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

TagResource

Adds the specified tags to the specified resource.

Request Syntax

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

{
   "Tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource.

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^arn:aws(-[a-z]{1,4}){0,2}:dlm:[A-Za-z0-9_/.-]{0,63}:\d+:policy/[0-9A-Za-z_-]{1,128}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags

One or more tags.

Type: String to string map

Map Entries: Maximum number of 200 items.

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

Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\p{all}]*`

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

UntagResource

Removes the specified tags from the specified resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource.

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^arn:aws(-[a-z]{1,4}){0,2}:dlm:[A-Za-z0-9_/.-]{0,63}:\d+:policy/[0-9A-Za-z_-]{1,128}$`

Required: Yes

TagKeys

The tag keys.

Array Members: Minimum number of 1 item. Maximum number of 200 items.

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

Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

UpdateLifecyclePolicy

Updates the specified lifecycle policy.

For more information about updating a policy, see Modify lifecycle policies.

Request Syntax

```
PATCH /policies/policyId HTTP/1.1
Content-type: application/json

{
   "CopyTags": boolean,
   "CreateInterval": number,
   "CrossRegionCopyTargets": [
      {
         "TargetRegion": "string"
      }
   ],
   "Description": "string",
   "Exclusions": {
      "ExcludeBootVolumes": boolean,
      "ExcludeTags": [
         {
            "Key": "string",
            "Value": "string"
         }
      ],
      "ExcludeVolumeTypes": [ "string" ]
   },
   "ExecutionRoleArn": "string",
   "ExtendDeletion": boolean,
   "PolicyDetails": {
      "Actions": [
         {
            "CrossRegionCopy": [
               {
                  "EncryptionConfiguration": {
                     "CmkArn": "string",
                     "Encrypted": boolean
                  },
                  "RetainRule": {
                     "Interval": number,
```

```
                    "IntervalUnit": "string"
                },
                "Target": "string"
            }
        ],
        "Name": "string"
    }
],
"CopyTags": boolean,
"CreateInterval": number,
"CrossRegionCopyTargets": [
    {
        "TargetRegion": "string"
    }
],
"EventSource": {
    "Parameters": {
        "DescriptionRegex": "string",
        "EventType": "string",
        "SnapshotOwner": [ "string" ]
    },
    "Type": "string"
},
"Exclusions": {
    "ExcludeBootVolumes": boolean,
    "ExcludeTags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "ExcludeVolumeTypes": [ "string" ]
},
"ExtendDeletion": boolean,
"Parameters": {
    "ExcludeBootVolume": boolean,
    "ExcludeDataVolumeTags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "NoReboot": boolean
},
```

```
      "PolicyLanguage": "string",
      "PolicyType": "string",
      "ResourceLocations": [ "string" ],
      "ResourceType": "string",
      "ResourceTypes": [ "string" ],
      "RetainInterval": number,
      "Schedules": [
         {
            "ArchiveRule": {
               "RetainRule": {
                  "RetentionArchiveTier": {
                     "Count": number,
                     "Interval": number,
                     "IntervalUnit": "string"
                  }
               }
            },
            "CopyTags": boolean,
            "CreateRule": {
               "CronExpression": "string",
               "Interval": number,
               "IntervalUnit": "string",
               "Location": "string",
               "Scripts": [
                  {
                     "ExecuteOperationOnScriptFailure": boolean,
                     "ExecutionHandler": "string",
                     "ExecutionHandlerService": "string",
                     "ExecutionTimeout": number,
                     "MaximumRetryCount": number,
                     "Stages": [ "string" ]
                  }
               ],
               "Times": [ "string" ]
            },
            "CrossRegionCopyRules": [
               {
                  "CmkArn": "string",
                  "CopyTags": boolean,
                  "DeprecateRule": {
                     "Interval": number,
                     "IntervalUnit": "string"
                  },
                  "Encrypted": boolean,
```

```
            "RetainRule": {
               "Interval": number,
               "IntervalUnit": "string"
            },
            "Target": "string",
            "TargetRegion": "string"
         }
      ],
      "DeprecateRule": {
         "Count": number,
         "Interval": number,
         "IntervalUnit": "string"
      },
      "FastRestoreRule": {
         "AvailabilityZoneIds": [ "string" ],
         "AvailabilityZones": [ "string" ],
         "Count": number,
         "Interval": number,
         "IntervalUnit": "string"
      },
      "Name": "string",
      "RetainRule": {
         "Count": number,
         "Interval": number,
         "IntervalUnit": "string"
      },
      "ShareRules": [
         {
            "TargetAccounts": [ "string" ],
            "UnshareInterval": number,
            "UnshareIntervalUnit": "string"
         }
      ],
      "TagsToAdd": [
         {
            "Key": "string",
            "Value": "string"
         }
      ],
      "VariableTags": [
         {
            "Key": "string",
            "Value": "string"
         }
```

```
            ]
         }
      ],
      "TargetTags": [
         {
            "Key": "string",
            "Value": "string"
         }
      ]
   },
   "RetainInterval": number,
   "State": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

policyId

The identifier of the lifecycle policy.

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

CopyTags

[Default policies only] Indicates whether the policy should copy tags from the source resource to the snapshot or AMI.

Type: Boolean

Required: No

CreateInterval

[Default policies only] Specifies how often the policy should run and create snapshots or AMIs. The creation frequency can range from 1 to 7 days.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

CrossRegionCopyTargets

[Default policies only] Specifies destination Regions for snapshot or AMI copies. You can specify up to 3 destination Regions. If you do not want to create cross-Region copies, omit this parameter.

Type: Array of CrossRegionCopyTarget objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

Description

A description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

Required: No

Exclusions

[Default policies only] Specifies exclusion parameters for volumes or instances for which you do not want to create snapshots or AMIs. The policy will not create snapshots or AMIs for target resources that match any of the specified exclusion parameters.

Type: Exclusions object

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the IAM role used to run the operations specified by the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `arn:aws(-[a-z]{1,4}){0,2}:iam::\d+:role/.*`

Required: No

ExtendDeletion

[Default policies only] Defines the snapshot or AMI retention behavior for the policy if the source volume or instance is deleted, or if the policy enters the error, disabled, or deleted state.

By default (**ExtendDeletion=false**):

- If a source resource is deleted, Amazon Data Lifecycle Manager will continue to delete previously created snapshots or AMIs, up to but not including the last one, based on the specified retention period. If you want Amazon Data Lifecycle Manager to delete all snapshots or AMIs, including the last one, specify `true`.
- If a policy enters the error, disabled, or deleted state, Amazon Data Lifecycle Manager stops deleting snapshots and AMIs. If you want Amazon Data Lifecycle Manager to continue deleting snapshots or AMIs, including the last one, if the policy enters one of these states, specify `true`.

If you enable extended deletion (**ExtendDeletion=true**), you override both default behaviors simultaneously.

Default: false

Type: Boolean

Required: No

PolicyDetails

The configuration of the lifecycle policy. You cannot update the policy type or the resource type.

Type: PolicyDetails object

Required: No

RetainInterval

[Default policies only] Specifies how long the policy should retain snapshots or AMIs before deleting them. The retention period can range from 2 to 14 days, but it must be greater than the creation frequency to ensure that the policy retains at least 1 snapshot or AMI at any given time.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

State

The desired activation state of the lifecycle policy after creation.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

InternalServerException

The service failed in an unexpected way.

HTTP Status Code: 500

InvalidRequestException

Bad request. The request is missing required parameters or has invalid parameters.

MutuallyExclusiveParameters

The request included parameters that cannot be provided together.

RequiredParameters

The request omitted one or more required parameters.

HTTP Status Code: 400

LimitExceededException

The request failed because a limit was exceeded.

ResourceType

Value is the type of resource for which a limit was exceeded.

HTTP Status Code: 429

ResourceNotFoundException

A requested resource was not found.

ResourceIds

Value is a list of resource IDs that were not found.

ResourceType

Value is the type of resource that was not found.

HTTP Status Code: 404

See Also

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

- AWS Command Line Interface 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
- AWS SDK for Ruby V3

Data Types

The Amazon Data Lifecycle Manager 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:

- Action
- ArchiveRetainRule
- ArchiveRule
- CreateRule
- CrossRegionCopyAction
- CrossRegionCopyDeprecateRule
- CrossRegionCopyRetainRule
- CrossRegionCopyRule
- CrossRegionCopyTarget
- DeprecateRule
- EncryptionConfiguration
- EventParameters
- EventSource
- Exclusions
- FastRestoreRule
- LifecyclePolicy
- LifecyclePolicySummary
- Parameters
- PolicyDetails
- RetainRule

- RetentionArchiveTier
- Schedule
- Script
- ShareRule
- Tag

Action

[Event-based policies only] Specifies an action for an event-based policy.

Contents

CrossRegionCopy

The rule for copying shared snapshots across Regions.

Type: Array of CrossRegionCopyAction objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: Yes

Name

A descriptive name for the action.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 120.

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

ArchiveRetainRule

[Custom snapshot policies only] Specifies information about the archive storage tier retention period.

Contents

RetentionArchiveTier

Information about retention period in the Amazon EBS Snapshots Archive. For more information, see Archive Amazon EBS snapshots.

Type: RetentionArchiveTier 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

ArchiveRule

[Custom snapshot policies only] Specifies a snapshot archiving rule for a schedule.

Contents

RetainRule

Information about the retention period for the snapshot archiving rule.

Type: ArchiveRetainRule 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

CreateRule

[Custom snapshot and AMI policies only] Specifies when the policy should create snapshots or AMIs.

> **Note**
>
> - You must specify either **CronExpression**, or **Interval**, **IntervalUnit**, and **Times**.
> - If you need to specify an ArchiveRule for the schedule, then you must specify a creation frequency of at least 28 days.

Contents

CronExpression

The schedule, as a Cron expression. The schedule interval must be between 1 hour and 1 year. For more information, see the Cron and rate expressions in the *Amazon EventBridge User Guide*.

Type: String

Length Constraints: Minimum length of 17. Maximum length of 106.

Pattern: `cron\([^\n]{11,100}\)`

Required: No

Interval

The interval between snapshots. The supported values are 1, 2, 3, 4, 6, 8, 12, and 24.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The interval unit.

Type: String

Valid Values: HOURS

Required: No

Location

[Custom snapshot policies only] Specifies the destination for snapshots created by the policy. The allowed destinations depend on the location of the targeted resources.

- If the policy targets resources in a Region, then you must create snapshots in the same Region as the source resource.
- If the policy targets resources in a Local Zone, you can create snapshots in the same Local Zone or in its parent Region.
- If the policy targets resources on an Outpost, then you can create snapshots on the same Outpost or in its parent Region.

Specify one of the following values:

- To create snapshots in the same Region as the source resource, specify CLOUD.
- To create snapshots in the same Local Zone as the source resource, specify LOCAL_ZONE.
- To create snapshots on the same Outpost as the source resource, specify OUTPOST_LOCAL.

Default: CLOUD

Type: String

Valid Values: CLOUD | OUTPOST_LOCAL | LOCAL_ZONE

Required: No

Scripts

[Custom snapshot policies that target instances only] Specifies pre and/or post scripts for a snapshot lifecycle policy that targets instances. This is useful for creating application-consistent snapshots, or for performing specific administrative tasks before or after Amazon Data Lifecycle Manager initiates snapshot creation.

For more information, see Automating application-consistent snapshots with pre and post scripts.

Type: Array of Script objects

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

Required: No

Times

The time, in UTC, to start the operation. The supported format is hh:mm.

The operation occurs within a one-hour window following the specified time. If you do not specify a time, Amazon Data Lifecycle Manager selects a time within the next 24 hours.

Type: Array of strings

Array Members: Maximum number of 1 item.

Length Constraints: Fixed length of 5.

Pattern: `^(0[0-9]|1[0-9]|2[0-3]):[0-5][0-9]$`

Required: No

See Also

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

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

CrossRegionCopyAction

[Event-based policies only] Specifies a cross-Region copy action for event-based policies.

> **Note**
>
> To specify a cross-Region copy rule for snapshot and AMI policies, use CrossRegionCopyRule.

Contents

EncryptionConfiguration

The encryption settings for the copied snapshot.

Type: EncryptionConfiguration object

Required: Yes

Target

The target Region.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^[\w:\-\/\*]+$`

Required: Yes

RetainRule

Specifies a retention rule for cross-Region snapshot copies created by snapshot or event-based policies, or cross-Region AMI copies created by AMI policies. After the retention period expires, the cross-Region copy is deleted.

Type: CrossRegionCopyRetainRule 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

CrossRegionCopyDeprecateRule

[Custom AMI policies only] Specifies an AMI deprecation rule for cross-Region AMI copies created by an AMI policy.

Contents

Interval

The period after which to deprecate the cross-Region AMI copies. The period must be less than or equal to the cross-Region AMI copy retention period, and it can't be greater than 10 years. This is equivalent to 120 months, 520 weeks, or 3650 days.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The unit of time in which to measure the **Interval**. For example, to deprecate a cross-Region AMI copy after 3 months, specify `Interval=3` and `IntervalUnit=MONTHS`.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

CrossRegionCopyRetainRule

Specifies a retention rule for cross-Region snapshot copies created by snapshot or event-based policies, or cross-Region AMI copies created by AMI policies. After the retention period expires, the cross-Region copy is deleted.

Contents

Interval

The amount of time to retain a cross-Region snapshot or AMI copy. The maximum is 100 years. This is equivalent to 1200 months, 5200 weeks, or 36500 days.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The unit of time for time-based retention. For example, to retain a cross-Region copy for 3 months, specify `Interval=3` and `IntervalUnit=MONTHS`.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

CrossRegionCopyRule

[Custom snapshot and AMI policies only] Specifies a cross-Region copy rule for a snapshot and AMI policies.

> **Note**
>
> To specify a cross-Region copy action for event-based polices, use CrossRegionCopyAction.

Contents

Encrypted

To encrypt a copy of an unencrypted snapshot if encryption by default is not enabled, enable encryption using this parameter. Copies of encrypted snapshots are encrypted, even if this parameter is false or if encryption by default is not enabled.

Type: Boolean

Required: Yes

CmkArn

The Amazon Resource Name (ARN) of the AWS KMS key to use for EBS encryption. If this parameter is not specified, the default KMS key for the account is used.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `arn:aws(-[a-z]{1,4}){0,2}:kms:([a-z]+-){2,3}\d:\d+:key/.*`

Required: No

CopyTags

Indicates whether to copy all user-defined tags from the source snapshot or AMI to the cross-Region copy.

Type: Boolean

Required: No

DeprecateRule

[Custom AMI policies only] The AMI deprecation rule for cross-Region AMI copies created by the rule.

Type: CrossRegionCopyDeprecateRule object

Required: No

RetainRule

The retention rule that indicates how long the cross-Region snapshot or AMI copies are to be retained in the destination Region.

Type: CrossRegionCopyRetainRule object

Required: No

Target

> **Note**
>
> Use this parameter for snapshot policies only. For AMI policies, use **TargetRegion** instead.

[Custom snapshot policies only] The target Region or the Amazon Resource Name (ARN) of the target Outpost for the snapshot copies.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^[\w:\-\/\*]+$`

Required: No

TargetRegion

> **Note**
>
> Use this parameter for AMI policies only. For snapshot policies, use **Target** instead. For snapshot policies created before the **Target** parameter was introduced, this parameter indicates the target Region for snapshot copies.

[Custom AMI policies only] The target Region or the Amazon Resource Name (ARN) of the target Outpost for the snapshot copies.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Pattern: `([a-z]+-){2,3}\d`

Required: No

See Also

For 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

CrossRegionCopyTarget

[Default policies only] Specifies a destination Region for cross-Region copy actions.

Contents

TargetRegion

The target Region, for example `us-east-1`.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 16.

Pattern: `([a-z]+-){2,3}\d`

Required: No

See Also

For 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

DeprecateRule

[Custom AMI policies only] Specifies an AMI deprecation rule for AMIs created by an AMI lifecycle policy.

For age-based schedules, you must specify **Interval** and **IntervalUnit**. For count-based schedules, you must specify **Count**.

Contents

Count

If the schedule has a count-based retention rule, this parameter specifies the number of oldest AMIs to deprecate. The count must be less than or equal to the schedule's retention count, and it can't be greater than 1000.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

Interval

If the schedule has an age-based retention rule, this parameter specifies the period after which to deprecate AMIs created by the schedule. The period must be less than or equal to the schedule's retention period, and it can't be greater than 10 years. This is equivalent to 120 months, 520 weeks, or 3650 days.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The unit of time in which to measure the **Interval**.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

EncryptionConfiguration

[Event-based policies only] Specifies the encryption settings for cross-Region snapshot copies created by event-based policies.

Contents

Encrypted

To encrypt a copy of an unencrypted snapshot when encryption by default is not enabled, enable encryption using this parameter. Copies of encrypted snapshots are encrypted, even if this parameter is false or when encryption by default is not enabled.

Type: Boolean

Required: Yes

CmkArn

The Amazon Resource Name (ARN) of the AWS KMS key to use for EBS encryption. If this parameter is not specified, the default KMS key for the account is used.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `arn:aws(-[a-z]{1,4}){0,2}:kms:([a-z]+-){2,3}\d:\d+:key/.*`

Required: No

See Also

For 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

EventParameters

[Event-based policies only] Specifies an event that activates an event-based policy.

Contents

DescriptionRegex

The snapshot description that can trigger the policy. The description pattern is specified using a regular expression. The policy runs only if a snapshot with a description that matches the specified pattern is shared with your account.

For example, specifying `^.*Created for policy: policy-1234567890abcdef0.*$` configures the policy to run only if snapshots created by policy `policy-1234567890abcdef0` are shared with your account.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Pattern: `[\p{all}]*`

Required: Yes

EventType

The type of event. Currently, only snapshot sharing events are supported.

Type: String

Valid Values: `shareSnapshot`

Required: Yes

SnapshotOwner

The IDs of the AWS accounts that can trigger policy by sharing snapshots with your account. The policy only runs if one of the specified AWS accounts shares a snapshot with your account.

Type: Array of strings

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

Length Constraints: Fixed length of 12.

Pattern: `^[0-9]{12}$`

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

EventSource

[Event-based policies only] Specifies an event that activates an event-based policy.

Contents

Type

The source of the event. Currently only managed Amazon EventBridge (formerly known as Amazon CloudWatch) events are supported.

Type: String

Valid Values: `MANAGED_CWE`

Required: Yes

Parameters

Information about the event.

Type: EventParameters 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

Exclusions

[Default policies only] Specifies exclusion parameters for volumes or instances for which you do not want to create snapshots or AMIs. The policy will not create snapshots or AMIs for target resources that match any of the specified exclusion parameters.

Contents

ExcludeBootVolumes

[Default policies for EBS snapshots only] Indicates whether to exclude volumes that are attached to instances as the boot volume. If you exclude boot volumes, only volumes attached as data (non-boot) volumes will be backed up by the policy. To exclude boot volumes, specify `true`.

Type: Boolean

Required: No

ExcludeTags

[Default policies for EBS-backed AMIs only] Specifies whether to exclude volumes that have specific tags.

Type: Array of Tag objects

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

Required: No

ExcludeVolumeTypes

[Default policies for EBS snapshots only] Specifies the volume types to exclude. Volumes of the specified types will not be targeted by the policy.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 6 items.

Required: No

See Also

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

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

FastRestoreRule

[Custom snapshot policies only] Specifies a rule for enabling fast snapshot restore for snapshots created by snapshot policies. You can enable fast snapshot restore based on either a count or a time interval.

Contents

AvailabilityZoneIds

The Availability Zone Ids in which to enable fast snapshot restore.

Type: Array of strings

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

Length Constraints: Minimum length of 0. Maximum length of 16.

Pattern: `[a-z]{3,4}\d-az\d+`

Required: No

AvailabilityZones

The Availability Zones in which to enable fast snapshot restore.

Type: Array of strings

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

Length Constraints: Minimum length of 0. Maximum length of 16.

Pattern: `([a-z]+-){2,3}\d[a-z]`

Required: No

Count

The number of snapshots to be enabled with fast snapshot restore.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

Interval

The amount of time to enable fast snapshot restore. The maximum is 100 years. This is equivalent to 1200 months, 5200 weeks, or 36500 days.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The unit of time for enabling fast snapshot restore.

Type: String

Valid Values: `HOURS | DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

LifecyclePolicy

Information about a lifecycle policy.

Contents

DateCreated

The local date and time when the lifecycle policy was created.

Type: Timestamp

Required: No

DateModified

The local date and time when the lifecycle policy was last modified.

Type: Timestamp

Required: No

DefaultPolicy

Indicates whether the policy is a default lifecycle policy or a custom lifecycle policy.

- `true` - the policy is a default policy.
- `false` - the policy is a custom policy.

Type: Boolean

Required: No

Description

The description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

Required: No

ExecutionRoleArn

The Amazon Resource Name (ARN) of the IAM role used to run the operations specified by the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `arn:aws(-[a-z]{1,4}){0,2}:iam::\d+:role/.*`

Required: No

PolicyArn

The Amazon Resource Name (ARN) of the policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Pattern: `^arn:aws(-[a-z]{1,4}){0,2}:dlm:[A-Za-z0-9_/.-]{0,63}:\d+:policy/[0-9A-Za-z_-]{1,128}$`

Required: No

PolicyDetails

The configuration of the lifecycle policy

Type: PolicyDetails object

Required: No

PolicyId

The identifier of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Required: No

State

The activation state of the lifecycle policy.

Type: String

Valid Values: `ENABLED | DISABLED | ERROR`

Required: No

StatusMessage

The description of the status.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: `[\p{all}]*`

Required: No

Tags

The tags.

Type: String to string map

Map Entries: Maximum number of 200 items.

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

Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\p{all}]*`

Required: No

See Also

For 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

LifecyclePolicySummary

Summary information about a lifecycle policy.

Contents

DefaultPolicy

[Default policies only] The type of default policy. Values include:

- `VOLUME` - Default policy for EBS snapshots
- `INSTANCE` - Default policy for EBS-backed AMIs

Type: Boolean

Required: No

Description

The description of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

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

Required: No

PolicyId

The identifier of the lifecycle policy.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 64.

Pattern: `policy-[a-f0-9]+`

Required: No

PolicyType

The type of policy. `EBS_SNAPSHOT_MANAGEMENT` indicates that the policy manages the lifecycle of Amazon EBS snapshots. `IMAGE_MANAGEMENT` indicates that the policy manages the

lifecycle of EBS-backed AMIs. `EVENT_BASED_POLICY` indicates that the policy automates cross-account snapshot copies for snapshots that are shared with your account.

Type: String

Valid Values: `EBS_SNAPSHOT_MANAGEMENT | IMAGE_MANAGEMENT | EVENT_BASED_POLICY`

Required: No

State

The activation state of the lifecycle policy.

Type: String

Valid Values: `ENABLED | DISABLED | ERROR`

Required: No

Tags

The tags.

Type: String to string map

Map Entries: Maximum number of 200 items.

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

Key Pattern: `^(?!aws:)[a-zA-Z+-=._:/]+$`

Value Length Constraints: Maximum length of 256.

Value Pattern: `[\p{all}]*`

Required: No

See Also

For 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

Parameters

[Custom snapshot and AMI policies only] Specifies optional parameters for snapshot and AMI policies. The set of valid parameters depends on the combination of policy type and target resource type.

If you choose to exclude boot volumes and you specify tags that consequently exclude all of the additional data volumes attached to an instance, then Amazon Data Lifecycle Manager will not create any snapshots for the affected instance, and it will emit a `SnapshotsCreateFailed` Amazon CloudWatch metric. For more information, see Monitor your policies using Amazon CloudWatch.

Contents

ExcludeBootVolume

[Custom snapshot policies that target instances only] Indicates whether to exclude the root volume from multi-volume snapshot sets. The default is `false`. If you specify `true`, then the root volumes attached to targeted instances will be excluded from the multi-volume snapshot sets created by the policy.

Type: Boolean

Required: No

ExcludeDataVolumeTags

[Custom snapshot policies that target instances only] The tags used to identify data (non-root) volumes to exclude from multi-volume snapshot sets.

If you create a snapshot lifecycle policy that targets instances and you specify tags for this parameter, then data volumes with the specified tags that are attached to targeted instances will be excluded from the multi-volume snapshot sets created by the policy.

Type: Array of Tag objects

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

Required: No

NoReboot

[Custom AMI policies only] Indicates whether targeted instances are rebooted when the lifecycle policy runs. `true` indicates that targeted instances are not rebooted when the policy runs. `false` indicates that target instances are rebooted when the policy runs. The default is `true` (instances are not rebooted).

Type: Boolean

Required: No

See Also

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

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

PolicyDetails

Specifies the configuration of a lifecycle policy.

Contents

Actions

[Event-based policies only] The actions to be performed when the event-based policy is activated. You can specify only one action per policy.

Type: Array of Action objects

Array Members: Fixed number of 1 item.

Required: No

CopyTags

[Default policies only] Indicates whether the policy should copy tags from the source resource to the snapshot or AMI. If you do not specify a value, the default is `false`.

Default: false

Type: Boolean

Required: No

CreateInterval

[Default policies only] Specifies how often the policy should run and create snapshots or AMIs. The creation frequency can range from 1 to 7 days. If you do not specify a value, the default is 1.

Default: 1

Type: Integer

Valid Range: Minimum value of 1.

Required: No

CrossRegionCopyTargets

[Default policies only] Specifies destination Regions for snapshot or AMI copies. You can specify up to 3 destination Regions. If you do not want to create cross-Region copies, omit this parameter.

Type: Array of CrossRegionCopyTarget objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

EventSource

[Event-based policies only] The event that activates the event-based policy.

Type: EventSource object

Required: No

Exclusions

[Default policies only] Specifies exclusion parameters for volumes or instances for which you do not want to create snapshots or AMIs. The policy will not create snapshots or AMIs for target resources that match any of the specified exclusion parameters.

Type: Exclusions object

Required: No

ExtendDeletion

[Default policies only] Defines the snapshot or AMI retention behavior for the policy if the source volume or instance is deleted, or if the policy enters the error, disabled, or deleted state.

By default (**ExtendDeletion=false**):

- If a source resource is deleted, Amazon Data Lifecycle Manager will continue to delete previously created snapshots or AMIs, up to but not including the last one, based on the specified retention period. If you want Amazon Data Lifecycle Manager to delete all snapshots or AMIs, including the last one, specify `true`.
- If a policy enters the error, disabled, or deleted state, Amazon Data Lifecycle Manager stops deleting snapshots and AMIs. If you want Amazon Data Lifecycle Manager to continue

deleting snapshots or AMIs, including the last one, if the policy enters one of these states, specify `true`.

If you enable extended deletion (**ExtendDeletion=true**), you override both default behaviors simultaneously.

If you do not specify a value, the default is `false`.

Default: false

Type: Boolean

Required: No

Parameters

[Custom snapshot and AMI policies only] A set of optional parameters for snapshot and AMI lifecycle policies.

> **Note**
>
> If you are modifying a policy that was created or previously modified using the Amazon Data Lifecycle Manager console, then you must include this parameter and specify either the default values or the new values that you require. You can't omit this parameter or set its values to null.

Type: Parameters object

Required: No

PolicyLanguage

The type of policy to create. Specify one of the following:

- `SIMPLIFIED` To create a default policy.
- `STANDARD` To create a custom policy.

Type: String

Valid Values: `SIMPLIFIED | STANDARD`

Required: No

PolicyType

The type of policy. Specify `EBS_SNAPSHOT_MANAGEMENT` to create a lifecycle policy that manages the lifecycle of Amazon EBS snapshots. Specify `IMAGE_MANAGEMENT` to create a lifecycle policy that manages the lifecycle of EBS-backed AMIs. Specify `EVENT_BASED_POLICY` to create an event-based policy that performs specific actions when a defined event occurs in your AWS account.

The default is `EBS_SNAPSHOT_MANAGEMENT`.

Type: String

Valid Values: `EBS_SNAPSHOT_MANAGEMENT | IMAGE_MANAGEMENT | EVENT_BASED_POLICY`

Required: No

ResourceLocations

[Custom snapshot and AMI policies only] The location of the resources to backup.

- If the source resources are located in a Region, specify `CLOUD`. In this case, the policy targets all resources of the specified type with matching target tags across all Availability Zones in the Region.
- **[Custom snapshot policies only]** If the source resources are located in a Local Zone, specify `LOCAL_ZONE`. In this case, the policy targets all resources of the specified type with matching target tags across all Local Zones in the Region.
- If the source resources are located on an Outpost in your account, specify `OUTPOST`. In this case, the policy targets all resources of the specified type with matching target tags across all of the Outposts in your account.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `CLOUD | OUTPOST | LOCAL_ZONE`

Required: No

ResourceType

[Default policies only] Specify the type of default policy to create.

- To create a default policy for EBS snapshots, that creates snapshots of all volumes in the Region that do not have recent backups, specify `VOLUME`.
- To create a default policy for EBS-backed AMIs, that creates EBS-backed AMIs from all instances in the Region that do not have recent backups, specify `INSTANCE`.

Type: String

Valid Values: `VOLUME | INSTANCE`

Required: No

ResourceTypes

[Custom snapshot policies only] The target resource type for snapshot and AMI lifecycle policies. Use `VOLUME` to create snapshots of individual volumes or use `INSTANCE` to create multi-volume snapshots from the volumes for an instance.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `VOLUME | INSTANCE`

Required: No

RetainInterval

[Default policies only] Specifies how long the policy should retain snapshots or AMIs before deleting them. The retention period can range from 2 to 14 days, but it must be greater than the creation frequency to ensure that the policy retains at least 1 snapshot or AMI at any given time. If you do not specify a value, the default is 7.

Default: 7

Type: Integer

Valid Range: Minimum value of 1.

Required: No

Schedules

[Custom snapshot and AMI policies only] The schedules of policy-defined actions for snapshot and AMI lifecycle policies. A policy can have up to four schedules—one mandatory schedule and up to three optional schedules.

Type: Array of Schedule objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

TargetTags

[Custom snapshot and AMI policies only] The single tag that identifies targeted resources for this policy.

Type: Array of Tag objects

Array Members: Minimum number of 1 item. Maximum number of 50 items.

Required: No

See Also

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

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

RetainRule

[Custom snapshot and AMI policies only] Specifies a retention rule for snapshots created by snapshot policies, or for AMIs created by AMI policies.

> **Note**
>
> For snapshot policies that have an ArchiveRule, this retention rule applies to standard tier retention. When the retention threshold is met, snapshots are moved from the standard to the archive tier.
> For snapshot policies that do not have an **ArchiveRule**, snapshots are permanently deleted when this retention threshold is met.

You can retain snapshots based on either a count or a time interval.

- **Count-based retention**

  You must specify **Count**. If you specify an ArchiveRule for the schedule, then you can specify a retention count of `0` to archive snapshots immediately after creation. If you specify a FastRestoreRule, ShareRule, or a CrossRegionCopyRule, then you must specify a retention count of 1 or more.

- **Age-based retention**

  You must specify **Interval** and **IntervalUnit**. If you specify an ArchiveRule for the schedule, then you can specify a retention interval of `0` days to archive snapshots immediately after creation. If you specify a FastRestoreRule, ShareRule, or a CrossRegionCopyRule, then you must specify a retention interval of 1 day or more.

Contents

Count

The number of snapshots to retain for each volume, up to a maximum of 1000. For example if you want to retain a maximum of three snapshots, specify 3. When the fourth snapshot is created, the oldest retained snapshot is deleted, or it is moved to the archive tier if you have specified an ArchiveRule.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 1000.

Required: No

Interval

The amount of time to retain each snapshot. The maximum is 100 years. This is equivalent to 1200 months, 5200 weeks, or 36500 days.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

IntervalUnit

The unit of time for time-based retention. For example, to retain snapshots for 3 months, specify `Interval=3` and `IntervalUnit=MONTHS`. Once the snapshot has been retained for 3 months, it is deleted, or it is moved to the archive tier if you have specified an ArchiveRule.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

RetentionArchiveTier

[Custom snapshot policies only] Describes the retention rule for archived snapshots. Once the archive retention threshold is met, the snapshots are permanently deleted from the archive tier.

> **Note**
>
> The archive retention rule must retain snapshots in the archive tier for a minimum of 90 days.

For **count-based schedules**, you must specify **Count**. For **age-based schedules**, you must specify **Interval** and **IntervalUnit**.

For more information about using snapshot archiving, see Considerations for snapshot lifecycle policies.

Contents

Count

The maximum number of snapshots to retain in the archive storage tier for each volume. The count must ensure that each snapshot remains in the archive tier for at least 90 days. For example, if the schedule creates snapshots every 30 days, you must specify a count of 3 or more to ensure that each snapshot is archived for at least 90 days.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

Interval

Specifies the period of time to retain snapshots in the archive tier. After this period expires, the snapshot is permanently deleted.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

IntervalUnit

The unit of time in which to measure the **Interval**. For example, to retain a snapshots in the archive tier for 6 months, specify `Interval=6` and `IntervalUnit=MONTHS`.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

For 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

Schedule

[Custom snapshot and AMI policies only] Specifies a schedule for a snapshot or AMI lifecycle policy.

Contents

ArchiveRule

[Custom snapshot policies that target volumes only] The snapshot archiving rule for the schedule. When you specify an archiving rule, snapshots are automatically moved from the standard tier to the archive tier once the schedule's retention threshold is met. Snapshots are then retained in the archive tier for the archive retention period that you specify.

For more information about using snapshot archiving, see Considerations for snapshot lifecycle policies.

Type: ArchiveRule object

Required: No

CopyTags

Copy all user-defined tags on a source volume to snapshots of the volume created by this policy.

Type: Boolean

Required: No

CreateRule

The creation rule.

Type: CreateRule object

Required: No

CrossRegionCopyRules

Specifies a rule for copying snapshots or AMIs across Regions.

> **Note**
>
> You can't specify cross-Region copy rules for policies that create snapshots on an Outpost or in a Local Zone. If the policy creates snapshots in a Region, then snapshots can be copied to up to three Regions or Outposts.

Type: Array of CrossRegionCopyRule objects

Array Members: Minimum number of 0 items. Maximum number of 3 items.

Required: No

DeprecateRule

[Custom AMI policies only] The AMI deprecation rule for the schedule.

Type: DeprecateRule object

Required: No

FastRestoreRule

[Custom snapshot policies only] The rule for enabling fast snapshot restore.

Type: FastRestoreRule object

Required: No

Name

The name of the schedule.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 120.

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

Required: No

RetainRule

The retention rule for snapshots or AMIs created by the policy.

Type: RetainRule object

Required: No

ShareRules

[Custom snapshot policies only] The rule for sharing snapshots with other AWS accounts.

Type: Array of ShareRule objects

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

Required: No

TagsToAdd

The tags to apply to policy-created resources. These user-defined tags are in addition to the AWS-added lifecycle tags.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 45 items.

Required: No

VariableTags

[AMI policies and snapshot policies that target instances only] A collection of key/value pairs with values determined dynamically when the policy is executed. Keys may be any valid Amazon EC2 tag key. Values must be in one of the two following formats: `$(instance-id)` or `$(timestamp)`. Variable tags are only valid for EBS Snapshot Management – Instance policies.

Type: Array of Tag objects

Array Members: Minimum number of 0 items. Maximum number of 45 items.

Required: No

See Also

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

- AWS SDK for C++

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

Script

[Custom snapshot policies that target instances only] Information about pre and/or post scripts for a snapshot lifecycle policy that targets instances. For more information, see Automating application-consistent snapshots with pre and post scripts.

Contents

ExecutionHandler

The SSM document that includes the pre and/or post scripts to run.

- If you are automating VSS backups, specify `AWS_VSS_BACKUP`. In this case, Amazon Data Lifecycle Manager automatically uses the `AWSEC2-CreateVssSnapshot` SSM document.
- If you are automating application-consistent snapshots for SAP HANA workloads, specify `AWSSystemsManagerSAP-CreateDLMSnapshotForSAPHANA`.
- If you are using a custom SSM document that you own, specify either the name or ARN of the SSM document. If you are using a custom SSM document that is shared with you, specify the ARN of the SSM document.

Type: String

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

Pattern: `^([a-zA-Z0-9_\-.]{3,128}|[a-zA-Z0-9_\-.:/]{3,200}|[A-Z0-9_]+)$`

Required: Yes

ExecuteOperationOnScriptFailure

Indicates whether Amazon Data Lifecycle Manager should default to crash-consistent snapshots if the pre script fails.

- To default to crash consistent snapshot if the pre script fails, specify `true`.
- To skip the instance for snapshot creation if the pre script fails, specify `false`.

This parameter is supported only if you run a pre script. If you run a post script only, omit this parameter.

Default: true

Type: Boolean

Required: No

ExecutionHandlerService

Indicates the service used to execute the pre and/or post scripts.

- If you are using custom SSM documents or automating application-consistent snapshots of SAP HANA workloads, specify `AWS_SYSTEMS_MANAGER`.
- If you are automating VSS Backups, omit this parameter.

Default: AWS_SYSTEMS_MANAGER

Type: String

Valid Values: `AWS_SYSTEMS_MANAGER`

Required: No

ExecutionTimeout

Specifies a timeout period, in seconds, after which Amazon Data Lifecycle Manager fails the script run attempt if it has not completed. If a script does not complete within its timeout period, Amazon Data Lifecycle Manager fails the attempt. The timeout period applies to the pre and post scripts individually.

If you are automating VSS Backups, omit this parameter.

Default: 10

Type: Integer

Valid Range: Minimum value of 10. Maximum value of 120.

Required: No

MaximumRetryCount

Specifies the number of times Amazon Data Lifecycle Manager should retry scripts that fail.

- If the pre script fails, Amazon Data Lifecycle Manager retries the entire snapshot creation process, including running the pre and post scripts.
- If the post script fails, Amazon Data Lifecycle Manager retries the post script only; in this case, the pre script will have completed and the snapshot might have been created.

If you do not want Amazon Data Lifecycle Manager to retry failed scripts, specify `0`.

Default: 0

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 3.

Required: No

Stages

Indicate which scripts Amazon Data Lifecycle Manager should run on target instances. Pre scripts run before Amazon Data Lifecycle Manager initiates snapshot creation. Post scripts run after Amazon Data Lifecycle Manager initiates snapshot creation.

- To run a pre script only, specify PRE. In this case, Amazon Data Lifecycle Manager calls the SSM document with the `pre-script` parameter before initiating snapshot creation.
- To run a post script only, specify POST. In this case, Amazon Data Lifecycle Manager calls the SSM document with the `post-script` parameter after initiating snapshot creation.
- To run both pre and post scripts, specify both PRE and POST. In this case, Amazon Data Lifecycle Manager calls the SSM document with the `pre-script` parameter before initiating snapshot creation, and then it calls the SSM document again with the `post-script` parameter after initiating snapshot creation.

If you are automating VSS Backups, omit this parameter.

Default: PRE and POST

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 2 items.

Valid Values: PRE | POST

Required: No

See Also

For 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

ShareRule

[Custom snapshot policies only] Specifies a rule for sharing snapshots across AWS accounts.

Contents

TargetAccounts

The IDs of the AWS accounts with which to share the snapshots.

Type: Array of strings

Array Members: Minimum number of 1 item.

Length Constraints: Fixed length of 12.

Pattern: `^[0-9]{12}$`

Required: Yes

UnshareInterval

The period after which snapshots that are shared with other AWS accounts are automatically unshared.

Type: Integer

Valid Range: Minimum value of 1.

Required: No

UnshareIntervalUnit

The unit of time for the automatic unsharing interval.

Type: String

Valid Values: `DAYS | WEEKS | MONTHS | YEARS`

Required: No

See Also

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

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

Tag

Specifies a tag for a resource.

Contents

Key

The tag key.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: `[\p{all}]*`

Required: Yes

Value

The tag value.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 500.

Pattern: `[\p{all}]*`

Required: Yes

See Also

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

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

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signing AWS API requests in the *IAM User Guide*.

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

Logging Amazon Data Lifecycle Manager API Calls Using AWS CloudTrail

Amazon Data Lifecycle Manager (Amazon DLM) is integrated with AWS CloudTrail, a service that provides a record of actions taken by a user, role, or an AWS service in Amazon DLM. CloudTrail captures all API calls for Amazon DLM as events, including calls from the Amazon DLM console and from code calls to the Amazon DLM APIs. If you create a trail, you can enable continuous delivery of CloudTrail events to an Amazon S3 bucket, including events for Amazon DLM. If you don't configure a trail, you can still view the most recent events in the CloudTrail console in **Event history**. Using the information collected by CloudTrail, you can determine the request that was made to Amazon DLM, the IP address from which the request was made, who made the request, when it was made, and additional details.

To learn more about CloudTrail, see the AWS CloudTrail User Guide.

Amazon DLM Information in CloudTrail

CloudTrail is enabled on your AWS account when you create the account. When activity occurs in Amazon DLM, that activity is recorded in a CloudTrail event along with other AWS service events in **Event history**. You can view, search, and download recent events in your AWS account. For more information, see Viewing Events with CloudTrail Event History.

For an ongoing record of events in your AWS account, including events for Amazon DLM, create a trail. A trail enables CloudTrail to deliver log files to an Amazon S3 bucket. By default, when you create a trail in the console, the trail applies to all regions. The trail logs events from all regions in the AWS partition and delivers the log files to the Amazon S3 bucket that you specify. Additionally, you can configure other AWS services to further analyze and act upon the event data collected in CloudTrail logs. For more information, see:

- Overview for Creating a Trail
- CloudTrail Supported Services and Integrations
- Configuring Amazon SNS Notifications for CloudTrail
- Receiving CloudTrail Log Files from Multiple Regions and Receiving CloudTrail Log Files from Multiple Accounts

All Amazon DLM actions are logged by CloudTrail. For example, calls to the `CreateLifecyclePolicy` and `DeleteLifecyclePolicy` actions generate entries in the CloudTrail log files. For the complete list of actions, see Actions.

Every event or log entry contains information about who generated the request. The identity information helps you determine the following:

- Which user made the request.
- Whether the request was made with temporary security credentials for a role or federated user.
- Whether the request was made by another AWS service.

For more information, see the CloudTrail userIdentity Element.

Understanding Amazon DLM Log File Entries

A trail is a configuration that enables delivery of events as log files to an Amazon S3 bucket that you specify. CloudTrail log files contain one or more log entries. An event represents a single request from any source and includes information about the requested action, the date and time of the action, request parameters, and so on. CloudTrail log files are not an ordered stack trace of the public API calls, so they do not appear in any specific order.

Example: CreateLifecyclePolicy

The following is an example CloudTrail log entry for the `CreateLifecyclePolicy` action.

```
{
    "eventVersion": "1.05",
    "userIdentity": {
        "type": "Root",
        "principalId": "123456789012",
        "arn": "arn:aws:iam::123456789012:root",
        "accountId": "123456789012",
        "accessKeyId": "AKIAJA2ELRVCPEXAMPLE",
        "userName": "user",
        "sessionContext": {
            "attributes": {
                "mfaAuthenticated": "false",
                "creationDate": "2018-07-24T18:01:05Z"
            }
        }
```

```
    },
    "eventTime": "2018-07-24T18:20:28Z",
    "eventSource": "dlm.amazonaws.com",
    "eventName": "CreateLifecyclePolicy",
    "awsRegion": "us-west-2",
    "sourceIPAddress": "54.240.230.179",
    "userAgent": "console.ec2.amazonaws.com",
    "requestParameters": {
        "ExecutionRoleArn": "arn:aws:iam::123456789012:role/service-role/
AWSDataLifecycleManagerServiceRole",
        "PolicyDetails": {
            "ResourceTypes": [
                "VOLUME"
            ],
            "Schedules": [
                {
                    "CreateRule": {
                        "Interval": 12,
                        "IntervalUnit": "HOURS",
                        "Times": [
                            "09:00"
                        ]
                    },
                    "Name": "Default Schedule",
                    "RetainRule": {
                        "Count": 3
                    },
                    "TagsToAdd": [
                        {
                            "Key": "Name",
                            "Value": "backup-my-volume"
                        }
                    ]
                }
            ],
            "TargetTags": [
                {
                    "Key": "Name",
                    "Value": "my-volume"
                }
            ]
        },
        "Description": "test-cloudtrail",
        "State": "DISABLED"
```

```
    },
    "responseElements": {
        "PolicyId": "policy-04ff8755fce0599eb"
    },
    "requestID": "3d714ca6-8f6e-11e8-92a4-35fd765427f0",
    "eventID": "28ab3121-6040-4a40-80c7-ae59b3adf405",
    "readOnly": false,
    "eventType": "AwsApiCall",
    "recipientAccountId": "123456789012"
}
```

Example: DeleteLifecyclePolicy

The following is an example CloudTrail log entry for the `DeleteLifecyclePolicy` action.

```
{
    "eventVersion": "1.05",
    "userIdentity": {
        "type": "Root",
        "principalId": "123456789012",
        "arn": "arn:aws:iam::123456789012:root",
        "accountId": "123456789012",
        "accessKeyId": "AKIAJA2ELRVCPEXAMPLE",
        "userName": "user",
        "sessionContext": {
            "attributes": {
                "mfaAuthenticated": "false",
                "creationDate": "2018-07-24T18:01:05Z"
            }
        }
    },
    "eventTime": "2018-07-24T19:33:33Z",
    "eventSource": "dlm.amazonaws.com",
    "eventName": "DeleteLifecyclePolicy",
    "awsRegion": "us-west-2",
    "sourceIPAddress": "54.240.230.241",
    "userAgent": "console.ec2.amazonaws.com",
    "requestParameters": {
        "policyId": "policy-04ff8755fce0599eb"
    },
    "responseElements": null,
    "requestID": "73260971-8f78-11e8-a156-598016e53fb2",
    "eventID": "3740f2fb-0d6a-4712-a7ad-eb9f17103fb2",
    "readOnly": false,
```

```
    "eventType": "AwsApiCall",
    "recipientAccountId": "123456789012"
}
```