API Reference

Amazon WorkSpaces Service

API Version 2015-04-08

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Amazon WorkSpaces Service: API Reference

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Welcome to the Amazon WorkSpaces API Reference

Amazon WorkSpaces enables you to provision virtual, cloud-based Microsoft Windows or Amazon Linux desktops for your users, known as *WorkSpaces*. WorkSpaces eliminates the need to procure and deploy hardware or install complex software. You can quickly add or remove users as your needs change. Users can access their virtual desktops from multiple devices or web browsers.

This API Reference provides detailed information about the actions, data types, parameters, and errors of the WorkSpaces service. For more information about the supported AWS Regions, endpoints, and service quotas of the WorkSpaces service, see WorkSpaces endpoints and quotas in the *AWS General Reference*.

You can also manage your WorkSpaces resources using the WorkSpaces console, AWS Command Line Interface (AWS CLI), and SDKs. For more information about administering WorkSpaces, see the Amazon WorkSpaces Administration Guide. For more information about using the Amazon WorkSpaces client application or web browser to access provisioned WorkSpaces, see the Amazon WorkSpaces User Guide. For more information about using the AWS CLI to manage your WorkSpaces resources, see the WorkSpaces section of the AWS CLI Reference.

Actions

The following actions are supported:

- AcceptAccountLinkInvitation
- AssociateConnectionAlias
- AssociateIpGroups
- AssociateWorkspaceApplication
- AuthorizeIpRules
- CopyWorkspaceImage
- CreateAccountLinkInvitation
- CreateConnectClientAddIn
- CreateConnectionAlias
- CreateIpGroup
- CreateStandbyWorkspaces
- CreateTags
- CreateUpdatedWorkspaceImage
- CreateWorkspaceBundle
- CreateWorkspaceImage
- CreateWorkspaces
- CreateWorkspacesPool
- DeleteAccountLinkInvitation
- DeleteClientBranding
- DeleteConnectClientAddIn
- DeleteConnectionAlias
- DeleteIpGroup
- DeleteTags
- DeleteWorkspaceBundle
- DeleteWorkspaceImage
- DeployWorkspaceApplications
- DeregisterWorkspaceDirectory

- DescribeAccount
- DescribeAccountModifications
- DescribeApplicationAssociations
- DescribeApplications
- DescribeBundleAssociations
- DescribeClientBranding
- DescribeClientProperties
- DescribeConnectClientAddIns
- DescribeConnectionAliases
- DescribeConnectionAliasPermissions
- DescribeCustomWorkspaceImageImport
- DescribeImageAssociations
- DescribeIpGroups
- DescribeTags
- DescribeWorkspaceAssociations
- DescribeWorkspaceBundles
- DescribeWorkspaceDirectories
- DescribeWorkspaceImagePermissions
- DescribeWorkspaceImages
- DescribeWorkspaces
- DescribeWorkspacesConnectionStatus
- DescribeWorkspaceSnapshots
- DescribeWorkspacesPools
- DescribeWorkspacesPoolSessions
- DisassociateConnectionAlias
- DisassociateIpGroups
- DisassociateWorkspaceApplication
- GetAccountLink
- ImportClientBranding
- ImportCustomWorkspaceImage

- ImportWorkspaceImage
- ListAccountLinks
- ListAvailableManagementCidrRanges
- MigrateWorkspace
- ModifyAccount
- ModifyCertificateBasedAuthProperties
- ModifyClientProperties
- ModifyEndpointEncryptionMode
- ModifySamlProperties
- ModifySelfservicePermissions
- ModifyStreamingProperties
- ModifyWorkspaceAccessProperties
- ModifyWorkspaceCreationProperties
- ModifyWorkspaceProperties
- ModifyWorkspaceState
- RebootWorkspaces
- RebuildWorkspaces
- RegisterWorkspaceDirectory
- RejectAccountLinkInvitation
- RestoreWorkspace
- RevokeIpRules
- StartWorkspaces
- StartWorkspacesPool
- StopWorkspaces
- StopWorkspacesPool
- TerminateWorkspaces
- TerminateWorkspacesPool
- TerminateWorkspacesPoolSession
- UpdateConnectClientAddIn
- UpdateConnectionAliasPermission

- UpdateRulesOfIpGroup
- UpdateWorkspaceBundle
- UpdateWorkspaceImagePermission
- UpdateWorkspacesPool

AcceptAccountLinkInvitation

Accepts the account link invitation.

> **Important**
>
> There's currently no unlinking capability after you accept the account linking invitation.

Request Syntax

```
{
   "ClientToken": "string",
   "LinkId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon WorkSpaces uses to ensure idempotent creation.

Type: String

Pattern: `^.{1,64}$`

Required: No

LinkId

The identifier of the account link.

Type: String

Pattern: `^link-.{8,24}$`

Required: Yes

Response Syntax

```
{
   "AccountLink": {
      "AccountLinkId": "string",
      "AccountLinkStatus": "string",
      "SourceAccountId": "string",
      "TargetAccountId": "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.

AccountLink

Information about the account link.

Type: AccountLink object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The `TargetAccountId` is already linked or invited.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

AssociateConnectionAlias

Associates the specified connection alias with the specified directory to enable cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

> **Note**
>
> Before performing this operation, call DescribeConnectionAliases to make sure that the current state of the connection alias is CREATED.

Request Syntax

```
{
   "AliasId": "string",
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

ResourceId

The identifier of the directory to associate the connection alias with.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{
   "ConnectionIdentifier": "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.

ConnectionIdentifier

The identifier of the connection alias association. You use the connection identifier in the DNS TXT record when you're configuring your DNS routing policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[a-zA-Z0-9]+$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

AssociateIpGroups

Associates the specified IP access control group with the specified directory.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

AssociateWorkspaceApplication

Associates the specified application to the specified WorkSpace.

Request Syntax

```
{
   "ApplicationId": "string",
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Association": {
      "AssociatedResourceId": "string",
      "AssociatedResourceType": "string",
      "Created": number,
```

```
        "LastUpdatedTime": number,
        "State": "string",
        "StateReason": {
           "ErrorCode": "string",
           "ErrorMessage": "string"
        },
        "WorkspaceId": "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.

Association

Information about the association between the specified WorkSpace and the specified application.

Type: WorkspaceResourceAssociation object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ApplicationNotSupportedException

The specified application is not supported.

HTTP Status Code: 400

ComputeNotCompatibleException

The compute type of the WorkSpace is not compatible with the application.

HTTP Status Code: 400

IncompatibleApplicationsException

The specified application is not compatible with the resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperatingSystemNotCompatibleException

The operating system of the WorkSpace is not compatible with the application.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

AuthorizeIpRules

Adds one or more rules to the specified IP access control group.

This action gives users permission to access their WorkSpaces from the CIDR address ranges specified in the rules.

Request Syntax

```
{
   "GroupId": "string",
   "UserRules": [
      {
         "ipRule": "string",
         "ruleDesc": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

The rules to add to the group.

Type: Array of IpRuleItem objects

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CopyWorkspaceImage

Copies the specified image from the specified Region to the current Region. For more information about copying images, see Copy a Custom WorkSpaces Image.

In the China (Ningxia) Region, you can copy images only within the same Region.

In AWS GovCloud (US), to copy images to and from other Regions, contact Support.

> **Important**
>
> Before copying a shared image, be sure to verify that it has been shared from the correct AWS account. To determine if an image has been shared and to see the ID of the AWS account that owns an image, use the DescribeWorkSpaceImages and DescribeWorkspaceImagePermissions API operations.

Request Syntax

```
{
   "Description": "string",
   "Name": "string",
   "SourceImageId": "string",
   "SourceRegion": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description of the image.

Type: String

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

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

Required: No

Name

The name of the image.

Type: String

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

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

Required: Yes

SourceImageId

The identifier of the source image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

SourceRegion

The identifier of the source Region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: Yes

Tags

The tags for the image.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "ImageId": "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.

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

CreateAccountLinkInvitation

Creates the account link invitation.

Request Syntax

```
{
   "ClientToken": "string",
   "TargetAccountId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon WorkSpaces uses to ensure idempotent creation.

Type: String

Pattern: `^.{1,64}$`

Required: No

TargetAccountId

The identifier of the target account.

Type: String

Pattern: `^\d{12}$`

Required: Yes

Response Syntax

```
{
   "AccountLink": {
      "AccountLinkId": "string",
```

```
        "AccountLinkStatus": "string",
        "SourceAccountId": "string",
        "TargetAccountId": "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.

AccountLink

Information about the account link.

Type: AccountLink object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The `TargetAccountId` is already linked or invited.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

CreateConnectClientAddIn

Creates a client-add-in for Amazon Connect within a directory. You can create only one Amazon Connect client add-in within a directory.

This client add-in allows WorkSpaces users to seamlessly connect to Amazon Connect.

Request Syntax

```
{
   "Name": "string",
   "ResourceId": "string",
   "URL": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Name

The name of the client add-in.

Type: String

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

Pattern: `^.*$`

Required: Yes

ResourceId

The directory identifier for which to configure the client add-in.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

URL

The endpoint URL of the Amazon Connect client add-in.

Type: String

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

Pattern: `^(http|https)\://\S+`

Required: Yes

Response Syntax

```
{
   "AddInId": "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.

AddInId

The client add-in identifier.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceCreationFailedException

The resource could not be created.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CreateConnectionAlias

Creates the specified connection alias for use with cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ConnectionString

A connection string in the form of a fully qualified domain name (FQDN), such as `www.example.com`.

> **Important**
>
> After you create a connection string, it is always associated to your AWS account. You cannot recreate the same connection string with a different account, even if you delete all instances of it from the original account. The connection string is globally reserved for your account.

Type: String

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

Pattern: `^[.0-9a-zA-Z\-]{1,255}$`

Required: Yes

Tags

The tags to associate with the connection alias.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "AliasId": "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.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

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

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

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

CreateIpGroup

Creates an IP access control group.

An IP access control group provides you with the ability to control the IP addresses from which users are allowed to access their WorkSpaces. To specify the CIDR address ranges, add rules to your IP access control group and then associate the group with your directory. You can add rules when you create the group or at any time using AuthorizeIpRules.

There is a default IP access control group associated with your directory. If you don't associate an IP access control group with your directory, the default group is used. The default group includes a default rule that allows users to access their WorkSpaces from anywhere. You cannot modify the default IP access control group for your directory.

Request Syntax

```
{
   "GroupDesc": "string",
   "GroupName": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "UserRules": [
      {
         "ipRule": "string",
         "ruleDesc": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupDesc

The description of the group.

Type: String

Required: No

GroupName

The name of the group.

Type: String

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of Tag objects

Required: No

UserRules

The rules to add to the group.

Type: Array of IpRuleItem objects

Required: No

Response Syntax

```
{
   "GroupId": "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.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceCreationFailedException

The resource could not be created.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

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

CreateStandbyWorkspaces

Creates a standby WorkSpace in a secondary Region.

Request Syntax

```
{
   "PrimaryRegion": "string",
   "StandbyWorkspaces": [
      {
         "DataReplication": "string",
         "DirectoryId": "string",
         "PrimaryWorkspaceId": "string",
         "Tags": [
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "VolumeEncryptionKey": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

PrimaryRegion

The Region of the primary WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: Yes

StandbyWorkspaces

Information about the standby WorkSpace to be created.

Type: Array of StandbyWorkspace objects

Required: Yes

Response Syntax

```
{
   "FailedStandbyRequests": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "StandbyWorkspaceRequest": {
            "DataReplication": "string",
            "DirectoryId": "string",
            "PrimaryWorkspaceId": "string",
            "Tags": [
               {
                  "Key": "string",
                  "Value": "string"
               }
            ],
            "VolumeEncryptionKey": "string"
         }
      }
   ],
   "PendingStandbyRequests": [
      {
         "DirectoryId": "string",
         "State": "string",
         "UserName": "string",
         "WorkspaceId": "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.

FailedStandbyRequests

Information about the standby WorkSpace that could not be created.

Type: Array of FailedCreateStandbyWorkspacesRequest objects

PendingStandbyRequests

Information about the standby WorkSpace that was created.

Type: Array of PendingCreateStandbyWorkspacesRequest objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CreateTags

Creates the specified tags for the specified WorkSpaces resource.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of Tag objects

Required: Yes

Response Elements

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

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CreateUpdatedWorkspaceImage

Creates a new updated WorkSpace image based on the specified source image. The new updated WorkSpace image has the latest drivers and other updates required by the Amazon WorkSpaces components.

To determine which WorkSpace images need to be updated with the latest Amazon WorkSpaces requirements, use DescribeWorkspaceImages.

> **Note**
>
> - Only Windows 10, Windows Server 2016, and Windows Server 2019 WorkSpace images can be programmatically updated at this time.
> - Microsoft Windows updates and other application updates are not included in the update process.
> - The source WorkSpace image is not deleted. You can delete the source image after you've verified your new updated image and created a new bundle.

Request Syntax

```
{
   "Description": "string",
   "Name": "string",
   "SourceImageId": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description of whether updates for the WorkSpace image are available.

Type: String

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

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

Required: Yes

Name

The name of the new updated WorkSpace image.

Type: String

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

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

Required: Yes

SourceImageId

The identifier of the source WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

Tags

The tags that you want to add to the new updated WorkSpace image.

> **Note**
>
> To add tags at the same time when you're creating the updated image, you must create an IAM policy that grants your IAM user permissions to use `workspaces:CreateTags`.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "ImageId": "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.

ImageId

The identifier of the new updated WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CreateWorkspaceBundle

Creates the specified WorkSpace bundle. For more information about creating WorkSpace bundles, see Create a Custom WorkSpaces Image and Bundle.

Request Syntax

```
{
   "BundleDescription": "string",
   "BundleName": "string",
   "ComputeType": {
      "Name": "string"
   },
   "ImageId": "string",
   "RootStorage": {
      "Capacity": "string"
   },
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "UserStorage": {
      "Capacity": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleDescription

The description of the bundle.

Type: String

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

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

Required: Yes

BundleName

The name of the bundle.

Type: String

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

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

Required: Yes

ComputeType

Describes the compute type of the bundle.

Type: ComputeType object

Required: Yes

ImageId

The identifier of the image that is used to create the bundle.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

RootStorage

Describes the root volume for a WorkSpace bundle.

Type: RootStorage object

Required: No

Tags

The tags associated with the bundle.

> **Note**
>
> To add tags at the same time when you're creating the bundle, you must create an IAM policy that grants your IAM user permissions to use `workspaces:CreateTags`.

Type: Array of Tag objects

Required: No

UserStorage

Describes the user volume for a WorkSpace bundle.

Type: UserStorage object

Required: Yes

Response Syntax

```
{
   "WorkspaceBundle": {
      "BundleId": "string",
      "BundleType": "string",
      "ComputeType": {
         "Name": "string"
      },
      "CreationTime": number,
      "Description": "string",
      "ImageId": "string",
      "LastUpdatedTime": number,
      "Name": "string",
      "Owner": "string",
      "RootStorage": {
         "Capacity": "string"
      },
      "State": "string",
      "UserStorage": {
         "Capacity": "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.

WorkspaceBundle

Describes a WorkSpace bundle.

Type: WorkspaceBundle object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

CreateWorkspaceImage

Creates a new WorkSpace image from an existing WorkSpace.

Request Syntax

```
{
   "Description": "string",
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

The description of the new WorkSpace image.

Type: String

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

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

Required: Yes

Name

The name of the new WorkSpace image.

Type: String

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

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

Required: Yes

Tags

The tags that you want to add to the new WorkSpace image. To add tags when you're creating the image, you must create an IAM policy that grants your IAM user permission to use `workspaces:CreateTags`.

Type: Array of Tag objects

Required: No

WorkspaceId

The identifier of the source WorkSpace

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Created": number,
   "Description": "string",
   "ImageId": "string",
   "Name": "string",
   "OperatingSystem": {
      "Type": "string"
   },
   "OwnerAccountId": "string",
   "RequiredTenancy": "string",
   "State": "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.

Created

The date when the image was created.

Type: Timestamp

Description

The description of the image.

Type: String

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

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

ImageId

The identifier of the new WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Name

The name of the image.

Type: String

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

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

OperatingSystem

The operating system that the image is running.

Type: OperatingSystem object

OwnerAccountId

The identifier of the AWS account that owns the image.

Type: String

Pattern: `^\d{12}$`

RequiredTenancy

Specifies whether the image is running on dedicated hardware. When Bring Your Own License (BYOL) is enabled, this value is set to DEDICATED. For more information, see Bring Your Own Windows Desktop Images..

Type: String

Valid Values: `DEFAULT | DEDICATED`

State

The availability status of the image.

Type: String

Valid Values: `AVAILABLE | PENDING | ERROR`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

CreateWorkspaces

Creates one or more WorkSpaces.

This operation is asynchronous and returns before the WorkSpaces are created.

> **Note**
>
> - The `MANUAL` running mode value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see Amazon WorkSpaces Core.
> - You don't need to specify the `PCOIP` protocol for Linux bundles because `DCV` (formerly WSP) is the default protocol for those bundles.
> - User-decoupled WorkSpaces are only supported by Amazon WorkSpaces Core.
> - Review your running mode to ensure you are using one that is optimal for your needs and budget. For more information on switching running modes, see Can I switch between hourly and monthly billing?

Request Syntax

```
{
   "Workspaces": [
      {
         "BundleId": "string",
         "DirectoryId": "string",
         "RootVolumeEncryptionEnabled": boolean,
         "Tags": [
            {
               "Key": "string",
               "Value": "string"
            }
         ],
         "UserName": "string",
         "UserVolumeEncryptionEnabled": boolean,
         "VolumeEncryptionKey": "string",
         "WorkspaceName": "string",
         "WorkspaceProperties": {
            "ComputeTypeName": "string",
```

```
            "GlobalAccelerator": {
               "Mode": "string",
               "PreferredProtocol": "string"
            },
            "OperatingSystemName": "string",
            "Protocols": [ "string" ],
            "RootVolumeSizeGib": number,
            "RunningMode": "string",
            "RunningModeAutoStopTimeoutInMinutes": number,
            "UserVolumeSizeGib": number
         }
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Workspaces

The WorkSpaces to create. You can specify up to 25 WorkSpaces.

Type: Array of WorkspaceRequest objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "WorkspaceRequest": {
            "BundleId": "string",
            "DirectoryId": "string",
            "RootVolumeEncryptionEnabled": boolean,
            "Tags": [
               {
                  "Key": "string",
```

```
                "Value": "string"
            }
        ],
        "UserName": "string",
        "UserVolumeEncryptionEnabled": boolean,
        "VolumeEncryptionKey": "string",
        "WorkspaceName": "string",
        "WorkspaceProperties": {
            "ComputeTypeName": "string",
            "GlobalAccelerator": {
                "Mode": "string",
                "PreferredProtocol": "string"
            },
            "OperatingSystemName": "string",
            "Protocols": [ "string" ],
            "RootVolumeSizeGib": number,
            "RunningMode": "string",
            "RunningModeAutoStopTimeoutInMinutes": number,
            "UserVolumeSizeGib": number
        }
    }
  }
],
"PendingRequests": [
  {
    "BundleId": "string",
    "ComputerName": "string",
    "DataReplicationSettings": {
        "DataReplication": "string",
        "RecoverySnapshotTime": number
    },
    "DirectoryId": "string",
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "IpAddress": "string",
    "ModificationStates": [
        {
            "Resource": "string",
            "State": "string"
        }
    ],
    "RelatedWorkspaces": [
        {
            "Region": "string",
```

```
                "State": "string",
                "Type": "string",
                "WorkspaceId": "string"
            }
        ],
        "RootVolumeEncryptionEnabled": boolean,
        "StandbyWorkspacesProperties": [
            {
                "DataReplication": "string",
                "RecoverySnapshotTime": number,
                "StandbyWorkspaceId": "string"
            }
        ],
        "State": "string",
        "SubnetId": "string",
        "UserName": "string",
        "UserVolumeEncryptionEnabled": boolean,
        "VolumeEncryptionKey": "string",
        "WorkspaceId": "string",
        "WorkspaceName": "string",
        "WorkspaceProperties": {
            "ComputeTypeName": "string",
            "GlobalAccelerator": {
                "Mode": "string",
                "PreferredProtocol": "string"
            },
            "OperatingSystemName": "string",
            "Protocols": [ "string" ],
            "RootVolumeSizeGib": number,
            "RunningMode": "string",
            "RunningModeAutoStopTimeoutInMinutes": number,
            "UserVolumeSizeGib": number
        }
    }
  ]
}
```

Response Elements

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

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

FailedRequests

Information about the WorkSpaces that could not be created.

Type: Array of FailedCreateWorkspaceRequest objects

PendingRequests

Information about the WorkSpaces that were created.

Because this operation is asynchronous, the identifier returned is not immediately available for use with other operations. For example, if you call DescribeWorkspaces before the WorkSpace is created, the information returned can be incomplete.

Type: Array of Workspace objects

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go v2

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

CreateWorkspacesPool

Creates a pool of WorkSpaces.

Request Syntax

```
{
   "ApplicationSettings": {
      "SettingsGroup": "string",
      "Status": "string"
   },
   "BundleId": "string",
   "Capacity": {
      "DesiredUserSessions": number
   },
   "Description": "string",
   "DirectoryId": "string",
   "PoolName": "string",
   "RunningMode": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TimeoutSettings": {
      "DisconnectTimeoutInSeconds": number,
      "IdleDisconnectTimeoutInSeconds": number,
      "MaxUserDurationInSeconds": number
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationSettings

Indicates the application settings of the pool.

Type: ApplicationSettingsRequest object

Required: No

BundleId

The identifier of the bundle for the pool.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

Capacity

The user capacity of the pool.

Type: Capacity object

Required: Yes

Description

The pool description.

Type: String

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

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

Required: Yes

DirectoryId

The identifier of the directory for the pool.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PoolName

The name of the pool.

Type: String

Pattern: `^[A-Za-z0-9][A-Za-z0-9_.-]{0,63}$`

Required: Yes

RunningMode

The running mode for the pool.

Type: String

Valid Values: `AUTO_STOP | ALWAYS_ON`

Required: No

Tags

The tags for the pool.

Type: Array of Tag objects

Required: No

TimeoutSettings

Indicates the timeout settings of the pool.

Type: TimeoutSettings object

Required: No

Response Syntax

```
{
   "WorkspacesPool": {
      "ApplicationSettings": {
         "S3BucketName": "string",
         "SettingsGroup": "string",
         "Status": "string"
      },
      "BundleId": "string",
      "CapacityStatus": {
         "ActiveUserSessions": number,
         "ActualUserSessions": number,
         "AvailableUserSessions": number,
         "DesiredUserSessions": number
```

```
        },
        "CreatedAt": number,
        "Description": "string",
        "DirectoryId": "string",
        "Errors": [
           {
              "ErrorCode": "string",
              "ErrorMessage": "string"
           }
        ],
        "PoolArn": "string",
        "PoolId": "string",
        "PoolName": "string",
        "RunningMode": "string",
        "State": "string",
        "TimeoutSettings": {
           "DisconnectTimeoutInSeconds": number,
           "IdleDisconnectTimeoutInSeconds": number,
           "MaxUserDurationInSeconds": number
        }
    }
}
```

Response Elements

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

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

WorkspacesPool

Indicates the pool to create.

Type: WorkspacesPool object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteAccountLinkInvitation

Deletes the account link invitation.

Request Syntax

```
{
   "ClientToken": "string",
   "LinkId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon WorkSpaces uses to ensure idempotent creation.

Type: String

Pattern: `^.{1,64}$`

Required: No

LinkId

The identifier of the account link.

Type: String

Pattern: `^link-.{8,24}$`

Required: Yes

Response Syntax

```
{
   "AccountLink": {
      "AccountLinkId": "string",
```

```
        "AccountLinkStatus": "string",
        "SourceAccountId": "string",
        "TargetAccountId": "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.

AccountLink

Information about the account link.

Type: AccountLink object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The `TargetAccountId` is already linked or invited.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

DeleteClientBranding

Deletes customized client branding. Client branding allows you to customize your WorkSpace's client login portal. You can tailor your login portal company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

After you delete your customized client branding, your login portal reverts to the default client branding.

Request Syntax

```
{
   "Platforms": [ "string" ],
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Platforms

The device type for which you want to delete client branding.

Type: Array of strings

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

Valid Values: `DeviceTypeWindows | DeviceTypeOsx | DeviceTypeAndroid | DeviceTypeIos | DeviceTypeLinux | DeviceTypeWeb`

Required: Yes

ResourceId

The directory identifier of the WorkSpace for which you want to delete client branding.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteConnectClientAddIn

Deletes a client-add-in for Amazon Connect that is configured within a directory.

Request Syntax

```
{
   "AddInId": "string",
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AddInId

The identifier of the client add-in to delete.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteConnectionAlias

Deletes the specified connection alias. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

> **Important**
>
> **If you will no longer be using a fully qualified domain name (FQDN) as the registration code for your WorkSpaces users, you must take certain precautions to prevent potential security issues.** For more information, see Security Considerations if You Stop Using Cross-Region Redirection.

> **Note**
>
> To delete a connection alias that has been shared, the shared account must first disassociate the connection alias from any directories it has been associated with. Then you must unshare the connection alias from the account it has been shared with. You can delete a connection alias only after it is no longer shared with any accounts or associated with any directories.

Request Syntax

```
{
   "AliasId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias to delete.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteIpGroup

Deletes the specified IP access control group.

You cannot delete an IP access control group that is associated with a directory.

Request Syntax

```
{
   "GroupId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the IP access control group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteTags

Deletes the specified tags from the specified WorkSpaces resource.

Request Syntax

```
{
   "ResourceId": "string",
   "TagKeys": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

TagKeys

The tag keys.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: Yes

Response Elements

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

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteWorkspaceBundle

Deletes the specified WorkSpace bundle. For more information about deleting WorkSpace bundles, see Delete a Custom WorkSpaces Bundle or Image.

Request Syntax

```
{
   "BundleId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeleteWorkspaceImage

Deletes the specified image from your account. To delete an image, you must first delete any bundles that are associated with the image and unshare the image if it is shared with other accounts.

Request Syntax

```
{
   "ImageId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

See Also

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

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

DeployWorkspaceApplications

Deploys associated applications to the specified WorkSpace

Request Syntax

```
{
   "Force": boolean,
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Force

Indicates whether the force flag is applied for the specified WorkSpace. When the force flag is enabled, it allows previously failed deployments to be retried.

Type: Boolean

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Deployment": {
      "Associations": [
         {
```

```
            "AssociatedResourceId": "string",
            "AssociatedResourceType": "string",
            "Created": number,
            "LastUpdatedTime": number,
            "State": "string",
            "StateReason": {
               "ErrorCode": "string",
               "ErrorMessage": "string"
            },
            "WorkspaceId": "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.

Deployment

The list of deployed associations and information about them.

Type: WorkSpaceApplicationDeployment object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

IncompatibleApplicationsException

The specified application is not compatible with the resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DeregisterWorkspaceDirectory

Deregisters the specified directory. This operation is asynchronous and returns before the WorkSpace directory is deregistered. If any WorkSpaces are registered to this directory, you must remove them before you can deregister the directory.

> **Note**
>
> Simple AD and AD Connector are made available to you free of charge to use with WorkSpaces. If there are no WorkSpaces being used with your Simple AD or AD Connector directory for 30 consecutive days, this directory will be automatically deregistered for use with Amazon WorkSpaces, and you will be charged for this directory as per the AWS Directory Service pricing terms.
> To delete empty directories, see Delete the Directory for Your WorkSpaces. If you delete your Simple AD or AD Connector directory, you can always create a new one when you want to start using WorkSpaces again.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory. If any WorkSpaces are registered to this directory, you must remove them before you deregister the directory, or you will receive an OperationNotSupportedException error.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeAccount

Retrieves a list that describes the configuration of Bring Your Own License (BYOL) for the specified account.

Response Syntax

```
{
   "DedicatedTenancyAccountType": "string",
   "DedicatedTenancyManagementCidrRange": "string",
   "DedicatedTenancySupport": "string",
   "Message": "string"
}
```

Response Elements

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

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

DedicatedTenancyAccountType

The type of linked account.

Type: String

Valid Values: `SOURCE_ACCOUNT | TARGET_ACCOUNT`

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, used for the management network interface.

The management network interface is connected to a secure Amazon WorkSpaces management network. It is used for interactive streaming of the WorkSpace desktop to Amazon WorkSpaces clients, and to allow Amazon WorkSpaces to manage the WorkSpace.

Type: String

Pattern: `(^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$`

DedicatedTenancySupport

The status of BYOL (whether BYOL is enabled or disabled).

Type: String

Valid Values: `ENABLED | DISABLED`

Message

The text message to describe the status of BYOL.

Type: String

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

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

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

- AWS SDK for Ruby V3

DescribeAccountModifications

Retrieves a list that describes modifications to the configuration of Bring Your Own License (BYOL) for the specified account.

Request Syntax

```
{
   "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "AccountModifications": [
      {
         "DedicatedTenancyManagementCidrRange": "string",
         "DedicatedTenancySupport": "string",
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "ModificationState": "string",
         "StartTime": number
      }
   ],
   "NextToken": "string"
```

```
}
```

Response Elements

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

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

AccountModifications

The list of modifications to the configuration of BYOL.

Type: Array of AccountModification objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

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

DescribeApplicationAssociations

Describes the associations between the application and the specified associated resources.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the specified application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

AssociatedResourceTypes

The resource type of the associated resources.

Type: Array of strings

Valid Values: `WORKSPACE | BUNDLE | IMAGE`

Required: Yes

MaxResults

The maximum number of associations to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "Associations": [
      {
         "ApplicationId": "string",
         "AssociatedResourceId": "string",
         "AssociatedResourceType": "string",
         "Created": number,
         "LastUpdatedTime": number,
         "State": "string",
         "StateReason": {
            "ErrorCode": "string",
            "ErrorMessage": "string"
         }
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

Associations

List of associations and information about them.

Type: Array of ApplicationResourceAssociation objects

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeApplications

Describes the specified applications by filtering based on their compute types, license availability, operating systems, and owners.

Request Syntax

```
{
   "ApplicationIds": [ "string" ],
   "ComputeTypeNames": [ "string" ],
   "LicenseType": "string",
   "MaxResults": number,
   "NextToken": "string",
   "OperatingSystemNames": [ "string" ],
   "Owner": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationIds

The identifiers of one or more applications.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

ComputeTypeNames

The compute types supported by the applications.

Type: Array of strings

Valid Values: `VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GENERALPURPOSE_4XLARGE | GENERALPURPOSE_8XLARGE | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN`

Required: No

LicenseType

The license availability for the applications.

Type: String

Valid Values: `LICENSED | UNLICENSED`

Required: No

MaxResults

The maximum number of applications to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

OperatingSystemNames

The operating systems supported by the applications.

Type: Array of strings

Valid Values: `AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8 | ROCKY_8`

Required: No

Owner

The owner of the applications.

Type: String

Pattern: ^\d{12}|AMAZON$

Required: No

Response Syntax

```
{
   "Applications": [
      {
         "ApplicationId": "string",
         "Created": number,
         "Description": "string",
         "LicenseType": "string",
         "Name": "string",
         "Owner": "string",
         "State": "string",
         "SupportedComputeTypeNames": [ "string" ],
         "SupportedOperatingSystemNames": [ "string" ]
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

Applications

List of information about the specified applications.

Type: Array of WorkSpaceApplication objects

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeBundleAssociations

Describes the associations between the applications and the specified bundle.

Request Syntax

```
{
   "AssociatedResourceTypes": [ "string" ],
   "BundleId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssociatedResourceTypes

The resource types of the associated resource.

Type: Array of strings

Valid Values: `APPLICATION`

Required: Yes

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Associations": [
      {
         "AssociatedResourceId": "string",
```

```
            "AssociatedResourceType": "string",
            "BundleId": "string",
            "Created": number,
            "LastUpdatedTime": number,
            "State": "string",
            "StateReason": {
               "ErrorCode": "string",
               "ErrorMessage": "string"
            }
         }
      ]
   }
```

Response Elements

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

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

Associations

List of information about the specified associations.

Type: Array of BundleResourceAssociation objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeClientBranding

Describes the specified client branding. Client branding allows you to customize the log in page of various device types for your users. You can add your company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

> **Note**
>
> Only device types that have branding information configured will be shown in the response.

Request Syntax

```
{
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The directory identifier of the WorkSpace for which you want to view client branding information.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Syntax

```
{
   "DeviceTypeAndroid": {
      "ForgotPasswordLink": "string",
```

```
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeIos": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "Logo2xUrl": "string",
        "Logo3xUrl": "string",
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeLinux": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeOsx": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeWeb": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
```

```
    },
    "DeviceTypeWindows": {
       "ForgotPasswordLink": "string",
       "LoginMessage": {
          "string" : "string"
       },
       "LogoUrl": "string",
       "SupportEmail": "string",
       "SupportLink": "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.

DeviceTypeAndroid

The branding information for Android devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeIos

The branding information for iOS devices.

Type: IosClientBrandingAttributes object

DeviceTypeLinux

The branding information for Linux devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeOsx

The branding information for macOS devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeWeb

The branding information for Web access.

Type: DefaultClientBrandingAttributes object

DeviceTypeWindows

The branding information for Windows devices.

Type: DefaultClientBrandingAttributes object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeClientProperties

Retrieves a list that describes one or more specified Amazon WorkSpaces clients.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ResourceIds

The resource identifier, in the form of directory IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{
   "ClientPropertiesList": [
      {
         "ClientProperties": {
            "LogUploadEnabled": "string",
            "ReconnectEnabled": "string"
         },
         "ResourceId": "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.

ClientPropertiesList

Information about the specified Amazon WorkSpaces clients.

Type: Array of ClientPropertiesResult objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++

- AWS SDK for Go 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

DescribeConnectClientAddIns

Retrieves a list of Amazon Connect client add-ins that have been created.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

MaxResults

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Syntax

```
{
   "AddIns": [
      {
         "AddInId": "string",
         "Name": "string",
         "ResourceId": "string",
         "URL": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

AddIns

Information about client add-ins.

Type: Array of ConnectClientAddIn objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeConnectionAliases

Retrieves a list that describes the connection aliases used for cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

AliasIds

The identifiers of the connection aliases to describe.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: No

Limit

The maximum number of connection aliases to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

ResourceId

The identifier of the directory associated with the connection alias.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```
{
   "ConnectionAliases": [
      {
         "AliasId": "string",
         "Associations": [
            {
               "AssociatedAccountId": "string",
               "AssociationStatus": "string",
               "ConnectionIdentifier": "string",
               "ResourceId": "string"
            }
         ],
         "ConnectionString": "string",
         "OwnerAccountId": "string",
         "State": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

ConnectionAliases

Information about the specified connection aliases.

Type: Array of ConnectionAlias objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeConnectionAliasPermissions

Describes the permissions that the owner of a connection alias has granted to another AWS account for the specified connection alias. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

MaxResults

The maximum number of results to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "AliasId": "string",
   "ConnectionAliasPermissions": [
      {
         "AllowAssociation": boolean,
         "SharedAccountId": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

ConnectionAliasPermissions

The permissions associated with a connection alias.

Type: Array of ConnectionAliasPermission objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeCustomWorkspaceImageImport

Retrieves information about a WorkSpace BYOL image being imported via ImportCustomWorkspaceImage.

Request Syntax

```
{
   "ImageId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ImageId

The identifier of the WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

Response Syntax

```
{
   "Created": number,
   "ErrorDetails": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string"
      }
   ],
   "ImageBuilderInstanceId": "string",
   "ImageId": "string",
   "ImageSource": { ... },
   "InfrastructureConfigurationArn": "string",
   "LastUpdatedTime": number,
   "State": "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.

Created

The timestamp when the WorkSpace image import was created.

Type: Timestamp

ErrorDetails

Describes in-depth details about the error. These details include the possible causes of the error and troubleshooting information.

Type: Array of CustomWorkspaceImageImportErrorDetails objects

ImageBuilderInstanceId

The image builder instance ID of the WorkSpace image.

Type: String

Length Constraints: Minimum length of 1.

ImageId

The identifier of the WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

ImageSource

Describes the image import source.

Type: ImageSourceIdentifier object

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

InfrastructureConfigurationArn

The infrastructure configuration ARN that specifies how the WorkSpace image is built.

Type: String

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

Pattern: `^arn:aws[^:]*:imagebuilder:[^:]+:(?:[0-9]{12}|aws):infrastructure-configuration/[a-z0-9-_]+$`

LastUpdatedTime

The timestamp when the WorkSpace image import was last updated.

Type: Timestamp

State

The state of the WorkSpace image.

Type: String

Valid Values: `PENDING | IN_PROGRESS | COMPLETED | ERROR`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeImageAssociations

Describes the associations between the applications and the specified image.

Request Syntax

```
{
   "AssociatedResourceTypes": [ "string" ],
   "ImageId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssociatedResourceTypes

The resource types of the associated resource.

Type: Array of strings

Valid Values: `APPLICATION`

Required: Yes

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

Response Syntax

```
{
   "Associations": [
      {
         "AssociatedResourceId": "string",
```

```
            "AssociatedResourceType": "string",
            "Created": number,
            "ImageId": "string",
            "LastUpdatedTime": number,
            "State": "string",
            "StateReason": {
               "ErrorCode": "string",
               "ErrorMessage": "string"
            }
         }
      ]
   }
```

Response Elements

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

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

Associations

List of information about the specified associations.

Type: Array of ImageResourceAssociation objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeIpGroups

Describes one or more of your IP access control groups.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

MaxResults

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Result": [
      {
         "groupDesc": "string",
         "groupId": "string",
         "groupName": "string",
         "userRules": [
            {
               "ipRule": "string",
               "ruleDesc": "string"
            }
         ]
      }
   ]
}
```

Response Elements

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

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

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Result

Information about the IP access control groups.

Type: Array of WorkspacesIpGroup objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeTags

Describes the specified tags for the specified WorkSpaces resource.

Request Syntax

```
{
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{
   "TagList": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Response Elements

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

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

TagList

The tags.

Type: Array of Tag objects

Errors

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

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceAssociations

Describes the associations betweens applications and the specified WorkSpace.

Request Syntax

```
{
   "AssociatedResourceTypes": [ "string" ],
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AssociatedResourceTypes

The resource types of the associated resources.

Type: Array of strings

Valid Values: `APPLICATION`

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Associations": [
      {
         "AssociatedResourceId": "string",
```

```
            "AssociatedResourceType": "string",
            "Created": number,
            "LastUpdatedTime": number,
            "State": "string",
            "StateReason": {
               "ErrorCode": "string",
               "ErrorMessage": "string"
            },
            "WorkspaceId": "string"
         }
      ]
   }
```

Response Elements

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

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

Associations

List of information about the specified associations.

Type: Array of WorkspaceResourceAssociation objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceBundles

Retrieves a list that describes the available WorkSpace bundles.

You can filter the results using either bundle ID or owner, but not both.

Request Syntax

```
{
   "BundleIds": [ "string" ],
   "NextToken": "string",
   "Owner": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleIds

The identifiers of the bundles. You cannot combine this parameter with any other filter.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

NextToken

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

Type: String

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

Required: No

Owner

The owner of the bundles. You cannot combine this parameter with any other filter.

To describe the bundles provided by AWS, specify `AMAZON`. To describe the bundles that belong to your account, don't specify a value.

Type: String

Required: No

Response Syntax

```
{
   "Bundles": [
      {
         "BundleId": "string",
         "BundleType": "string",
         "ComputeType": {
            "Name": "string"
         },
         "CreationTime": number,
         "Description": "string",
         "ImageId": "string",
         "LastUpdatedTime": number,
         "Name": "string",
         "Owner": "string",
         "RootStorage": {
            "Capacity": "string"
         },
         "State": "string",
         "UserStorage": {
            "Capacity": "string"
         }
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

Bundles

Information about the bundles.

Type: Array of WorkspaceBundle objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return. This token is valid for one day and must be used within that time frame.

Type: String

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

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceDirectories

Describes the available directories that are registered with Amazon WorkSpaces.

Request Syntax

```
{
   "DirectoryIds": [ "string" ],
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "Limit": number,
   "NextToken": "string",
   "WorkspaceDirectoryNames": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryIds

The identifiers of the directories. If the value is null, all directories are retrieved.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

Filters

The filter condition for the WorkSpaces.

Type: Array of DescribeWorkspaceDirectoriesFilter objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

Limit

The maximum number of directories to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

WorkspaceDirectoryNames

The names of the WorkSpace directories.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

Response Syntax

```
{
   "Directories": [
      {
         "ActiveDirectoryConfig": {
            "DomainName": "string",
            "ServiceAccountSecretArn": "string"
         },
         "Alias": "string",
         "CertificateBasedAuthProperties": {
```

```
            "CertificateAuthorityArn": "string",
            "Status": "string"
        },
        "CustomerUserName": "string",
        "DirectoryId": "string",
        "DirectoryName": "string",
        "DirectoryType": "string",
        "DnsIpAddresses": [ "string" ],
        "EndpointEncryptionMode": "string",
        "ErrorMessage": "string",
        "IamRoleId": "string",
        "IDCConfig": {
            "ApplicationArn": "string",
            "InstanceArn": "string"
        },
        "ipGroupIds": [ "string" ],
        "MicrosoftEntraConfig": {
            "ApplicationConfigSecretArn": "string",
            "TenantId": "string"
        },
        "RegistrationCode": "string",
        "SamlProperties": {
            "RelayStateParameterName": "string",
            "Status": "string",
            "UserAccessUrl": "string"
        },
        "SelfservicePermissions": {
            "ChangeComputeType": "string",
            "IncreaseVolumeSize": "string",
            "RebuildWorkspace": "string",
            "RestartWorkspace": "string",
            "SwitchRunningMode": "string"
        },
        "State": "string",
        "StreamingProperties": {
            "GlobalAccelerator": {
                "Mode": "string",
                "PreferredProtocol": "string"
            },
            "StorageConnectors": [
                {
                    "ConnectorType": "string",
                    "Status": "string"
                }
```

```
            ],
            "StreamingExperiencePreferredProtocol": "string",
            "UserSettings": [
               {
                  "Action": "string",
                  "MaximumLength": number,
                  "Permission": "string"
               }
            ]
         },
         "SubnetIds": [ "string" ],
         "Tenancy": "string",
         "UserIdentityType": "string",
         "WorkspaceAccessProperties": {
            "AccessEndpointConfig": {
               "AccessEndpoints": [
                  {
                     "AccessEndpointType": "string",
                     "VpcEndpointId": "string"
                  }
               ],
               "InternetFallbackProtocols": [ "string" ]
            },
            "DeviceTypeAndroid": "string",
            "DeviceTypeChromeOs": "string",
            "DeviceTypeIos": "string",
            "DeviceTypeLinux": "string",
            "DeviceTypeOsx": "string",
            "DeviceTypeWeb": "string",
            "DeviceTypeWindows": "string",
            "DeviceTypeWorkSpacesThinClient": "string",
            "DeviceTypeZeroClient": "string"
         },
         "WorkspaceCreationProperties": {
            "CustomSecurityGroupId": "string",
            "DefaultOu": "string",
            "EnableInternetAccess": boolean,
            "EnableMaintenanceMode": boolean,
            "InstanceIamRoleArn": "string",
            "UserEnabledAsLocalAdministrator": boolean
         },
         "WorkspaceDirectoryDescription": "string",
         "WorkspaceDirectoryName": "string",
         "WorkspaceSecurityGroupId": "string",
```

```
            "WorkspaceType": "string"
        }
    ],
    "NextToken": "string"
}
```

Response Elements

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

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

Directories

Information about the directories.

Type: Array of WorkspaceDirectory objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceImagePermissions

Describes the permissions that the owner of an image has granted to other AWS accounts for an image.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

MaxResults

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "ImageId": "string",
   "ImagePermissions": [
      {
         "SharedAccountId": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

ImagePermissions

The identifiers of the AWS accounts that the image has been shared with.

Type: Array of ImagePermission objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceImages

Retrieves a list that describes one or more specified images, if the image identifiers are provided. Otherwise, all images in the account are described.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ImageIds

The identifier of the image.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

ImageType

The type (owned or shared) of the image.

Type: String

Valid Values: `OWNED | SHARED`

Required: No

MaxResults

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "Images": [
      {
         "Created": number,
         "Description": "string",
         "ErrorCode": "string",
         "ErrorDetails": [
            {
               "ErrorCode": "string",
               "ErrorMessage": "string"
            }
         ],
         "ErrorMessage": "string",
         "ImageId": "string",
         "Name": "string",
         "OperatingSystem": {
            "Type": "string"
         },
         "OwnerAccountId": "string",
         "RequiredTenancy": "string",
         "State": "string",
         "Updates": {
            "Description": "string",
            "UpdateAvailable": boolean
```

```
            }
        }
    ],
    "NextToken": "string"
}
```

Response Elements

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

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

Images

Information about the images.

Type: Array of WorkspaceImage objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

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

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

DescribeWorkspaces

Describes the specified WorkSpaces.

You can filter the results by using the bundle identifier, directory identifier, or owner, but you can specify only one filter at a time.

Request Syntax

```
{
   "BundleId": "string",
   "DirectoryId": "string",
   "Limit": number,
   "NextToken": "string",
   "UserName": "string",
   "WorkspaceIds": [ "string" ],
   "WorkspaceName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle. All WorkSpaces that are created from this bundle are retrieved. You cannot combine this parameter with any other filter.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

DirectoryId

The identifier of the directory. In addition, you can optionally specify a specific directory user (see `UserName`). You cannot combine this parameter with any other filter.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

Limit

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

UserName

The name of the directory user. You must specify this parameter with `DirectoryId`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

WorkspaceIds

The identifiers of the WorkSpaces. You cannot combine this parameter with any other filter.

Because the CreateWorkspaces operation is asynchronous, the identifier it returns is not immediately available. If you immediately call DescribeWorkspaces with this identifier, no information is returned.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

WorkspaceName

The name of the user-decoupled WorkSpace.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_.()-]{1,63}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Workspaces": [
      {
         "BundleId": "string",
         "ComputerName": "string",
         "DataReplicationSettings": {
            "DataReplication": "string",
            "RecoverySnapshotTime": number
         },
         "DirectoryId": "string",
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "IpAddress": "string",
         "ModificationStates": [
            {
               "Resource": "string",
               "State": "string"
            }
         ],
         "RelatedWorkspaces": [
            {
               "Region": "string",
               "State": "string",
               "Type": "string",
               "WorkspaceId": "string"
            }
```

```
        ],
        "RootVolumeEncryptionEnabled": boolean,
        "StandbyWorkspacesProperties": [
           {
              "DataReplication": "string",
              "RecoverySnapshotTime": number,
              "StandbyWorkspaceId": "string"
           }
        ],
        "State": "string",
        "SubnetId": "string",
        "UserName": "string",
        "UserVolumeEncryptionEnabled": boolean,
        "VolumeEncryptionKey": "string",
        "WorkspaceId": "string",
        "WorkspaceName": "string",
        "WorkspaceProperties": {
           "ComputeTypeName": "string",
           "GlobalAccelerator": {
              "Mode": "string",
              "PreferredProtocol": "string"
           },
           "OperatingSystemName": "string",
           "Protocols": [ "string" ],
           "RootVolumeSizeGib": number,
           "RunningMode": "string",
           "RunningModeAutoStopTimeoutInMinutes": number,
           "UserVolumeSizeGib": number
        }
     }
   ]
}
```

Response Elements

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

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

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Workspaces

Information about the WorkSpaces.

Because CreateWorkspaces is an asynchronous operation, some of the returned information could be incomplete.

Type: Array of Workspace objects

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

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

DescribeWorkspacesConnectionStatus

Describes the connection status of the specified WorkSpaces.

Request Syntax

```
{
   "NextToken": "string",
   "WorkspaceIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

WorkspaceIds

The identifiers of the WorkSpaces. You can specify up to 25 WorkSpaces.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

Response Syntax

```
{
```

```
    "NextToken": "string",
    "WorkspacesConnectionStatus": [
        {
            "ConnectionState": "string",
            "ConnectionStateCheckTimestamp": number,
            "LastKnownUserConnectionTimestamp": number,
            "WorkspaceId": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

WorkspacesConnectionStatus

Information about the connection status of the WorkSpace.

Type: Array of WorkspaceConnectionStatus objects

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspaceSnapshots

Describes the snapshots for the specified WorkSpace.

Request Syntax

```
{
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "RebuildSnapshots": [
      {
         "SnapshotTime": number
      }
   ],
   "RestoreSnapshots": [
      {
         "SnapshotTime": number
      }
   ]
}
```

Response Elements

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

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

RebuildSnapshots

Information about the snapshots that can be used to rebuild a WorkSpace. These snapshots include the user volume.

Type: Array of Snapshot objects

RestoreSnapshots

Information about the snapshots that can be used to restore a WorkSpace. These snapshots include both the root volume and the user volume.

Type: Array of Snapshot objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspacesPools

Describes the specified WorkSpaces Pools.

Request Syntax

```
{
   "Filters": [
      {
         "Name": "string",
         "Operator": "string",
         "Values": [ "string" ]
      }
   ],
   "Limit": number,
   "NextToken": "string",
   "PoolIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Filters

The filter conditions for the WorkSpaces Pool to return.

Type: Array of DescribeWorkspacesPoolsFilter objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

Limit

The maximum number of items to return.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

PoolIds

The identifier of the WorkSpaces Pools.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^wspool-[0-9a-z]{9}$`

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "WorkspacesPools": [
      {
         "ApplicationSettings": {
            "S3BucketName": "string",
            "SettingsGroup": "string",
            "Status": "string"
         },
         "BundleId": "string",
         "CapacityStatus": {
            "ActiveUserSessions": number,
            "ActualUserSessions": number,
            "AvailableUserSessions": number,
            "DesiredUserSessions": number
         },
         "CreatedAt": number,
```

```
            "Description": "string",
            "DirectoryId": "string",
            "Errors": [
               {
                  "ErrorCode": "string",
                  "ErrorMessage": "string"
               }
            ],
            "PoolArn": "string",
            "PoolId": "string",
            "PoolName": "string",
            "RunningMode": "string",
            "State": "string",
            "TimeoutSettings": {
               "DisconnectTimeoutInSeconds": number,
               "IdleDisconnectTimeoutInSeconds": number,
               "MaxUserDurationInSeconds": number
            }
         }
      ]
}
```

Response Elements

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

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

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

WorkspacesPools

Information about the WorkSpaces Pools.

Type: Array of WorkspacesPool objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DescribeWorkspacesPoolSessions

Retrieves a list that describes the streaming sessions for a specified pool.

Request Syntax

```
{
   "Limit": number,
   "NextToken": "string",
   "PoolId": "string",
   "UserId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Limit

The maximum size of each page of results. The default value is 20 and the maximum value is 50.

Type: Integer

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

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

UserId

The identifier of the user.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: No

Response Syntax

```
{
   "NextToken": "string",
   "Sessions": [
      {
         "AuthenticationType": "string",
         "ConnectionState": "string",
         "ExpirationTime": number,
         "InstanceId": "string",
         "NetworkAccessConfiguration": {
            "EniId": "string",
            "EniPrivateIpAddress": "string"
         },
         "PoolId": "string",
         "SessionId": "string",
         "StartTime": number,
         "UserId": "string"
      }
   ]
}
```

Response Elements

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

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

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Sessions

Describes the pool sessions.

Type: Array of WorkspacesPoolSession objects

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface

- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DisassociateConnectionAlias

Disassociates a connection alias from a directory. Disassociating a connection alias disables cross-Region redirection between two directories in different Regions. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

> **Note**
>
> Before performing this operation, call DescribeConnectionAliases to make sure that the current state of the connection alias is CREATED.

Request Syntax

```
{
   "AliasId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias to disassociate.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DisassociateIpGroups

Disassociates the specified IP access control group from the specified directory.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

DisassociateWorkspaceApplication

Disassociates the specified application from a WorkSpace.

Request Syntax

```
{
   "ApplicationId": "string",
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "Association": {
      "AssociatedResourceId": "string",
      "AssociatedResourceType": "string",
```

```
        "Created": number,
        "LastUpdatedTime": number,
        "State": "string",
        "StateReason": {
           "ErrorCode": "string",
           "ErrorMessage": "string"
        },
        "WorkspaceId": "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.

Association

Information about the targeted association.

Type: WorkspaceResourceAssociation object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

GetAccountLink

Retrieves account link information.

Request Syntax

```
{
   "LinkedAccountId": "string",
   "LinkId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

LinkedAccountId

The identifier of the account link

Type: String

Pattern: `^\d{12}$`

Required: No

LinkId

The identifier of the account to link.

Type: String

Pattern: `^link-.{8,24}$`

Required: No

Response Syntax

```
{
   "AccountLink": {
      "AccountLinkId": "string",
      "AccountLinkStatus": "string",
```

```
        "SourceAccountId": "string",
        "TargetAccountId": "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.

AccountLink

The account link of the account link to retrieve.

Type: AccountLink object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

ImportClientBranding

Imports client branding. Client branding allows you to customize your WorkSpace's client login portal. You can tailor your login portal company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

After you import client branding, the default branding experience for the specified platform type is replaced with the imported experience

Note

- You must specify at least one platform type when importing client branding.
- You can import up to 6 MB of data with each request. If your request exceeds this limit, you can import client branding for different platform types using separate requests.
- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify only one parameter for each platform type, but not both.
- Imported data can take up to a minute to appear in the WorkSpaces client.

Request Syntax

```
{
   "DeviceTypeAndroid": {
      "ForgotPasswordLink": "string",
      "LoginMessage": {
         "string" : "string"
      },
      "Logo": blob,
      "SupportEmail": "string",
      "SupportLink": "string"
   },
   "DeviceTypeIos": {
      "ForgotPasswordLink": "string",
      "LoginMessage": {
         "string" : "string"
      },
      "Logo": blob,
      "Logo2x": blob,
      "Logo3x": blob,
```

```
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeLinux": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "Logo": blob,
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeOsx": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "Logo": blob,
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeWeb": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "Logo": blob,
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeWindows": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "Logo": blob,
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DeviceTypeAndroid

The branding information to import for Android devices.

Type: DefaultImportClientBrandingAttributes object

Required: No

DeviceTypeIos

The branding information to import for iOS devices.

Type: IosImportClientBrandingAttributes object

Required: No

DeviceTypeLinux

The branding information to import for Linux devices.

Type: DefaultImportClientBrandingAttributes object

Required: No

DeviceTypeOsx

The branding information to import for macOS devices.

Type: DefaultImportClientBrandingAttributes object

Required: No

DeviceTypeWeb

The branding information to import for web access.

Type: DefaultImportClientBrandingAttributes object

Required: No

DeviceTypeWindows

The branding information to import for Windows devices.

Type: DefaultImportClientBrandingAttributes object

Required: No

ResourceId

The directory identifier of the WorkSpace for which you want to import client branding.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Syntax

```
{
   "DeviceTypeAndroid": {
      "ForgotPasswordLink": "string",
      "LoginMessage": {
         "string" : "string"
      },
      "LogoUrl": "string",
      "SupportEmail": "string",
      "SupportLink": "string"
   },
   "DeviceTypeIos": {
      "ForgotPasswordLink": "string",
      "LoginMessage": {
         "string" : "string"
      },
      "Logo2xUrl": "string",
      "Logo3xUrl": "string",
      "LogoUrl": "string",
      "SupportEmail": "string",
      "SupportLink": "string"
   },
   "DeviceTypeLinux": {
      "ForgotPasswordLink": "string",
      "LoginMessage": {
         "string" : "string"
```

```
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeOsx": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeWeb": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "string"
    },
    "DeviceTypeWindows": {
        "ForgotPasswordLink": "string",
        "LoginMessage": {
            "string" : "string"
        },
        "LogoUrl": "string",
        "SupportEmail": "string",
        "SupportLink": "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.

DeviceTypeAndroid

The branding information configured for Android devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeIos

The branding information configured for iOS devices.

Type: IosClientBrandingAttributes object

DeviceTypeLinux

The branding information configured for Linux devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeOsx

The branding information configured for macOS devices.

Type: DefaultClientBrandingAttributes object

DeviceTypeWeb

The branding information configured for web access.

Type: DefaultClientBrandingAttributes object

DeviceTypeWindows

The branding information configured for Windows devices.

Type: DefaultClientBrandingAttributes object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ImportCustomWorkspaceImage

Imports the specified Windows 10 or 11 Bring Your Own License (BYOL) image into Amazon WorkSpaces using EC2 Image Builder. The image must be an already licensed image that is in your AWS account, and you must own the image. For more information about creating BYOL images, see Bring Your Own Windows Desktop Licenses.

Request Syntax

```
{
   "ComputeType": "string",
   "ImageDescription": "string",
   "ImageName": "string",
   "ImageSource": { ... },
   "InfrastructureConfigurationArn": "string",
   "OsVersion": "string",
   "Platform": "string",
   "Protocol": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ComputeType

The supported compute type for the WorkSpace image.

Type: String

Valid Values: `BASE | GRAPHICS_G4DN`

Required: Yes

ImageDescription

The description of the WorkSpace image.

Type: String

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

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

Required: Yes

ImageName

The name of the WorkSpace image.

Type: String

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

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

Required: Yes

ImageSource

The options for image import source.

Type: ImageSourceIdentifier object

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

Required: Yes

InfrastructureConfigurationArn

The infrastructure configuration ARN that specifies how the WorkSpace image is built.

Type: String

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

Pattern: `^arn:aws[^:]*:imagebuilder:[^:]+:(?:[0-9]{12}|aws):infrastructure-configuration/[a-z0-9-_]+$`

Required: Yes

OsVersion

The OS version for the WorkSpace image source.

Type: String

Valid Values: `Windows_10 | Windows_11`

Required: Yes

Platform

The platform for the WorkSpace image source.

Type: String

Valid Values: `WINDOWS`

Required: Yes

Protocol

The supported protocol for the WorkSpace image. Windows 11 does not support PCOIP protocol.

Type: String

Valid Values: `PCOIP | DCV | BYOP`

Required: Yes

Tags

The resource tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "ImageId": "string",
   "State": "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.

ImageId

The identifier of the WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

State

The state of the WorkSpace image.

Type: String

Valid Values: `PENDING | IN_PROGRESS | COMPLETED | ERROR`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ImportWorkspaceImage

Imports the specified Windows 10 or 11 Bring Your Own License (BYOL) image into Amazon WorkSpaces. The image must be an already licensed Amazon EC2 image that is in your AWS account, and you must own the image. For more information about creating BYOL images, see Bring Your Own Windows Desktop Licenses.

Request Syntax

```
{
   "Applications": [ "string" ],
   "Ec2ImageId": "string",
   "ImageDescription": "string",
   "ImageName": "string",
   "IngestionProcess": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Applications

If specified, the version of Microsoft Office to subscribe to. Valid only for Windows 10 and 11 BYOL images. For more information about subscribing to Office for BYOL images, see Bring Your Own Windows Desktop Licenses.

> **Note**
>
> - Although this parameter is an array, only one item is allowed at this time.
> - During the image import process, non-GPU DCV (formerly WSP) WorkSpaces with Windows 11 support only `Microsoft_Office_2019`. GPU DCV (formerly WSP) WorkSpaces with Windows 11 do not support Office installation.

Type: Array of strings

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

Valid Values: `Microsoft_Office_2016 | Microsoft_Office_2019`

Required: No

Ec2ImageId

The identifier of the EC2 image.

Type: String

Pattern: `^ami\-([a-f0-9]{8}|[a-f0-9]{17})$`

Required: Yes

ImageDescription

The description of the WorkSpace image.

Type: String

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

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

Required: Yes

ImageName

The name of the WorkSpace image.

Type: String

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

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

Required: Yes

IngestionProcess

The ingestion process to be used when importing the image, depending on which protocol you want to use for your BYOL Workspace image, either PCoIP, WSP, or bring your own protocol

(BYOP). To use DCV, specify a value that ends in _WSP. To use PCoIP, specify a value that does not end in _WSP. To use BYOP, specify a value that ends in _BYOP.

For non-GPU-enabled bundles (bundles other than Graphics or GraphicsPro), specify BYOL_REGULAR, BYOL_REGULAR_WSP, or BYOL_REGULAR_BYOP, depending on the protocol.

> **Note**
>
> The BYOL_REGULAR_BYOP and BYOL_GRAPHICS_G4DN_BYOP values are only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use these values. For more information, see Amazon WorkSpaces Core.

Type: String

Valid Values: BYOL_REGULAR | BYOL_GRAPHICS | BYOL_GRAPHICSPRO | BYOL_GRAPHICS_G4DN | BYOL_REGULAR_WSP | BYOL_GRAPHICS_G4DN_WSP | BYOL_REGULAR_BYOP | BYOL_GRAPHICS_G4DN_BYOP

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of Tag objects

Required: No

Response Syntax

```
{
   "ImageId": "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.

ImageId

The identifier of the WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ListAccountLinks

Lists all account links.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

LinkStatusFilter

Filters the account based on their link status.

Type: Array of strings

Valid Values: `LINKED | LINKING_FAILED | LINK_NOT_FOUND | PENDING_ACCEPTANCE_BY_TARGET_ACCOUNT | REJECTED`

Required: No

MaxResults

The maximum number of accounts to return.

Type: Integer

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

Required: No

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Required: No

Response Syntax

```
{
   "AccountLinks": [
      {
         "AccountLinkId": "string",
         "AccountLinkStatus": "string",
         "SourceAccountId": "string",
         "TargetAccountId": "string"
      }
   ],
   "NextToken": "string"
}
```

Response Elements

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

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

AccountLinks

Information about the account links.

Type: Array of AccountLink objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

ListAvailableManagementCidrRanges

Retrieves a list of IP address ranges, specified as IPv4 CIDR blocks, that you can use for the network management interface when you enable Bring Your Own License (BYOL).

This operation can be run only by AWS accounts that are enabled for BYOL. If your account isn't enabled for BYOL, you'll receive an `AccessDeniedException` error.

The management network interface is connected to a secure Amazon WorkSpaces management network. It is used for interactive streaming of the WorkSpace desktop to Amazon WorkSpaces clients, and to allow Amazon WorkSpaces to manage the WorkSpace.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

ManagementCidrRangeConstraint

The IP address range to search. Specify an IP address range that is compatible with your network and in CIDR notation (that is, specify the range as an IPv4 CIDR block).

Type: String

Pattern: `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])(\/(3[0-2]|[1-2][0-9]|[0-9]))$`

Required: Yes

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 5.

Required: No

NextToken

If you received a `NextToken` from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

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

Required: No

Response Syntax

```
{
   "ManagementCidrRanges": [ "string" ],
   "NextToken": "string"
}
```

Response Elements

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

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

ManagementCidrRanges

The list of available IP address ranges, specified as IPv4 CIDR blocks.

Type: Array of strings

Pattern: `(^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$`

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

MigrateWorkspace

Migrates a WorkSpace from one operating system or bundle type to another, while retaining the data on the user volume.

The migration process recreates the WorkSpace by using a new root volume from the target bundle image and the user volume from the last available snapshot of the original WorkSpace. During migration, the original `D:\Users\%USERNAME%` user profile folder is renamed to `D:\Users\%USERNAME%MMddyyTHHmmss%.NotMigrated`. A new `D:\Users\%USERNAME%\` folder is generated by the new OS. Certain files in the old user profile are moved to the new user profile.

For available migration scenarios, details about what happens during migration, and best practices, see Migrate a WorkSpace.

Request Syntax

```
{
   "BundleId": "string",
   "SourceWorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the target bundle type to migrate the WorkSpace to.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

SourceWorkspaceId

The identifier of the WorkSpace to migrate from.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
   "SourceWorkspaceId": "string",
   "TargetWorkspaceId": "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.

SourceWorkspaceId

The original identifier of the WorkSpace that is being migrated.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

TargetWorkspaceId

The new identifier of the WorkSpace that is being migrated. If the migration does not succeed, the target WorkSpace ID will not be used, and the WorkSpace will still have the original WorkSpace ID.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

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

ModifyAccount

Modifies the configuration of Bring Your Own License (BYOL) for the specified account.

Request Syntax

```
{
   "DedicatedTenancyManagementCidrRange": "string",
   "DedicatedTenancySupport": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, for the management network interface. Specify an IP address range that is compatible with your network and in CIDR notation (that is, specify the range as an IPv4 CIDR block). The CIDR block size must be /16 (for example, 203.0.113.25/16). It must also be specified as available by the `ListAvailableManagementCidrRanges` operation.

Type: String

Pattern: `(^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$`

Required: No

DedicatedTenancySupport

The status of BYOL.

Type: String

Valid Values: `ENABLED`

Required: No

Response Syntax

```
{
   "Message": "string"
}
```

Response Elements

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

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

Message

The text message to describe the status of BYOL modification.

Type: String

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

ModifyCertificateBasedAuthProperties

Modifies the properties of the certificate-based authentication you want to use with your WorkSpaces.

Request Syntax

```
{
   "CertificateBasedAuthProperties": {
      "CertificateAuthorityArn": "string",
      "Status": "string"
   },
   "PropertiesToDelete": [ "string" ],
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CertificateBasedAuthProperties

The properties of the certificate-based authentication.

Type: CertificateBasedAuthProperties object

Required: No

PropertiesToDelete

The properties of the certificate-based authentication you want to delete.

Type: Array of strings

Valid Values: `CERTIFICATE_BASED_AUTH_PROPERTIES_CERTIFICATE_AUTHORITY_ARN`

Required: No

ResourceId

The resource identifiers, in the form of directory IDs.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyClientProperties

Modifies the properties of the specified Amazon WorkSpaces clients.

Request Syntax

```
{
   "ClientProperties": {
      "LogUploadEnabled": "string",
      "ReconnectEnabled": "string"
   },
   "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientProperties

Information about the Amazon WorkSpaces client.

Type: ClientProperties object

Required: Yes

ResourceId

The resource identifiers, in the form of directory IDs.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyEndpointEncryptionMode

Modifies the endpoint encryption mode that allows you to configure the specified directory between Standard TLS and FIPS 140-2 validated mode.

Request Syntax

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

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

EndpointEncryptionMode

The encryption mode used for endpoint connections when streaming to WorkSpaces Personal or WorkSpace Pools.

Type: String

Valid Values: `STANDARD_TLS | FIPS_VALIDATED`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifySamlProperties

Modifies multiple properties related to SAML 2.0 authentication, including the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Request Syntax

```
{
   "PropertiesToDelete": [ "string" ],
   "ResourceId": "string",
   "SamlProperties": {
      "RelayStateParameterName": "string",
      "Status": "string",
      "UserAccessUrl": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

PropertiesToDelete

The SAML properties to delete as part of your request.

Specify one of the following options:

- `SAML_PROPERTIES_USER_ACCESS_URL` to delete the user access URL.
- `SAML_PROPERTIES_RELAY_STATE_PARAMETER_NAME` to delete the relay state parameter name.

Type: Array of strings

Valid Values: `SAML_PROPERTIES_USER_ACCESS_URL` | `SAML_PROPERTIES_RELAY_STATE_PARAMETER_NAME`

Required: No

ResourceId

The directory identifier for which you want to configure SAML properties.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

SamlProperties

The properties for configuring SAML 2.0 authentication.

Type: SamlProperties object

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifySelfservicePermissions

Modifies the self-service WorkSpace management capabilities for your users. For more information, see Enable Self-Service WorkSpace Management Capabilities for Your Users.

Request Syntax

```
{
   "ResourceId": "string",
   "SelfservicePermissions": {
      "ChangeComputeType": "string",
      "IncreaseVolumeSize": "string",
      "RebuildWorkspace": "string",
      "RestartWorkspace": "string",
      "SwitchRunningMode": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

SelfservicePermissions

The permissions to enable or disable self-service capabilities.

Type: SelfservicePermissions object

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyStreamingProperties

Modifies the specified streaming properties.

Request Syntax

```
{
   "ResourceId": "string",
   "StreamingProperties": {
      "GlobalAccelerator": {
         "Mode": "string",
         "PreferredProtocol": "string"
      },
      "StorageConnectors": [
         {
            "ConnectorType": "string",
            "Status": "string"
         }
      ],
      "StreamingExperiencePreferredProtocol": "string",
      "UserSettings": [
         {
            "Action": "string",
            "MaximumLength": number,
            "Permission": "string"
         }
      ]
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the resource.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

StreamingProperties

The streaming properties to configure.

Type: StreamingProperties object

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyWorkspaceAccessProperties

Specifies which devices and operating systems users can use to access their WorkSpaces. For more information, see Control Device Access.

Request Syntax

```
{
   "ResourceId": "string",
   "WorkspaceAccessProperties": {
      "AccessEndpointConfig": {
         "AccessEndpoints": [
            {
               "AccessEndpointType": "string",
               "VpcEndpointId": "string"
            }
         ],
         "InternetFallbackProtocols": [ "string" ]
      },
      "DeviceTypeAndroid": "string",
      "DeviceTypeChromeOs": "string",
      "DeviceTypeIos": "string",
      "DeviceTypeLinux": "string",
      "DeviceTypeOsx": "string",
      "DeviceTypeWeb": "string",
      "DeviceTypeWindows": "string",
      "DeviceTypeWorkSpacesThinClient": "string",
      "DeviceTypeZeroClient": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

WorkspaceAccessProperties

The device types and operating systems to enable or disable for access.

Type: WorkspaceAccessProperties object

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterCombinationException

Two or more of the selected parameter values cannot be used together.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyWorkspaceCreationProperties

Modify the default properties used to create WorkSpaces.

Request Syntax

```
{
   "ResourceId": "string",
   "WorkspaceCreationProperties": {
      "CustomSecurityGroupId": "string",
      "DefaultOu": "string",
      "EnableInternetAccess": boolean,
      "EnableMaintenanceMode": boolean,
      "InstanceIamRoleArn": "string",
      "UserEnabledAsLocalAdministrator": boolean
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

WorkspaceCreationProperties

The default properties for creating WorkSpaces.

Type: WorkspaceCreationProperties object

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

ModifyWorkspaceProperties

Modifies the specified WorkSpace properties. For important information about how to modify the size of the root and user volumes, see Modify a WorkSpace.

> **Note**
>
> The MANUAL running mode value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see Amazon WorkSpaces Core.

Request Syntax

```
{
   "DataReplication": "string",
   "WorkspaceId": "string",
   "WorkspaceProperties": {
      "ComputeTypeName": "string",
      "GlobalAccelerator": {
         "Mode": "string",
         "PreferredProtocol": "string"
      },
      "OperatingSystemName": "string",
      "Protocols": [ "string" ],
      "RootVolumeSizeGib": number,
      "RunningMode": "string",
      "RunningModeAutoStopTimeoutInMinutes": number,
      "UserVolumeSizeGib": number
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

DataReplication

Indicates the data replication status.

Type: String

Valid Values: `NO_REPLICATION | PRIMARY_AS_SOURCE`

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceProperties

The properties of the WorkSpace.

Type: WorkspaceProperties object

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

UnsupportedWorkspaceConfigurationException

The configuration of this WorkSpace is not supported for this operation. For more information, see Required Configuration and Service Components for WorkSpaces .

HTTP Status Code: 400

See Also

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

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

- AWS SDK for Ruby V3

ModifyWorkspaceState

Sets the state of the specified WorkSpace.

To maintain a WorkSpace without being interrupted, set the WorkSpace state to `ADMIN_MAINTENANCE`. WorkSpaces in this state do not respond to requests to reboot, stop, start, rebuild, or restore. An AutoStop WorkSpace in this state is not stopped. Users cannot log into a WorkSpace in the `ADMIN_MAINTENANCE` state.

Request Syntax

```
{
   "WorkspaceId": "string",
   "WorkspaceState": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceState

The WorkSpace state.

Type: String

Valid Values: `AVAILABLE | ADMIN_MAINTENANCE`

Required: Yes

Response Elements

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

Errors

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

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

RebootWorkspaces

Reboots the specified WorkSpaces.

You cannot reboot a WorkSpace unless its state is `AVAILABLE`, `UNHEALTHY`, or `REBOOTING`. Reboot a WorkSpace in the `REBOOTING` state only if your WorkSpace has been stuck in the `REBOOTING` state for over 20 minutes.

This operation is asynchronous and returns before the WorkSpaces have rebooted.

Request Syntax

```
{
   "RebootWorkspaceRequests": [
      {
         "WorkspaceId": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

RebootWorkspaceRequests

The WorkSpaces to reboot. You can specify up to 25 WorkSpaces.

Type: Array of RebootRequest objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
      {
         "ErrorCode": "string",
```

```
            "ErrorMessage": "string",
            "WorkspaceId": "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.

FailedRequests

Information about the WorkSpaces that could not be rebooted.

Type: Array of FailedWorkspaceChangeRequest objects

Errors

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

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

RebuildWorkspaces

Rebuilds the specified WorkSpace.

You cannot rebuild a WorkSpace unless its state is `AVAILABLE`, `ERROR`, `UNHEALTHY`, `STOPPED`, or `REBOOTING`.

Rebuilding a WorkSpace is a potentially destructive action that can result in the loss of data. For more information, see Rebuild a WorkSpace.

This operation is asynchronous and returns before the WorkSpaces have been completely rebuilt.

Request Syntax

```
{
   "RebuildWorkspaceRequests": [
      {
         "WorkspaceId": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

RebuildWorkspaceRequests

The WorkSpace to rebuild. You can specify a single WorkSpace.

Type: Array of RebuildRequest objects

Array Members: Fixed number of 1 item.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
```

```
        {
            "ErrorCode": "string",
            "ErrorMessage": "string",
            "WorkspaceId": "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.

FailedRequests

Information about the WorkSpace that could not be rebuilt.

Type: Array of FailedWorkspaceChangeRequest objects

Errors

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

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

RegisterWorkspaceDirectory

Registers the specified directory. This operation is asynchronous and returns before the WorkSpace directory is registered. If this is the first time you are registering a directory, you will need to create the workspaces_DefaultRole role before you can register a directory. For more information, see Creating the workspaces_DefaultRole Role.

Request Syntax

```
{
   "ActiveDirectoryConfig": {
      "DomainName": "string",
      "ServiceAccountSecretArn": "string"
   },
   "DirectoryId": "string",
   "EnableSelfService": boolean,
   "IdcInstanceArn": "string",
   "MicrosoftEntraConfig": {
      "ApplicationConfigSecretArn": "string",
      "TenantId": "string"
   },
   "SubnetIds": [ "string" ],
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "Tenancy": "string",
   "UserIdentityType": "string",
   "WorkspaceDirectoryDescription": "string",
   "WorkspaceDirectoryName": "string",
   "WorkspaceType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ActiveDirectoryConfig

The active directory config of the directory.

Type: ActiveDirectoryConfig object

Required: No

DirectoryId

The identifier of the directory. You cannot register a directory if it does not have a status of Active. If the directory does not have a status of Active, you will receive an InvalidResourceStateException error. If you have already registered the maximum number of directories that you can register with Amazon WorkSpaces, you will receive a ResourceLimitExceededException error. Deregister directories that you are not using for WorkSpaces, and try again.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

EnableSelfService

Indicates whether self-service capabilities are enabled or disabled.

Type: Boolean

Required: No

IdcInstanceArn

The Amazon Resource Name (ARN) of the identity center instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: No

MicrosoftEntraConfig

The details about Microsoft Entra config.

Type: MicrosoftEntraConfig object

Required: No

SubnetIds

The identifiers of the subnets for your virtual private cloud (VPC). Make sure that the subnets are in supported Availability Zones. The subnets must also be in separate Availability Zones. If these conditions are not met, you will receive an OperationNotSupportedException error.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

Tags

The tags associated with the directory.

Type: Array of Tag objects

Required: No

Tenancy

Indicates whether your WorkSpace directory is dedicated or shared. To use Bring Your Own License (BYOL) images, this value must be set to `DEDICATED` and your AWS account must be enabled for BYOL. If your account has not been enabled for BYOL, you will receive an InvalidParameterValuesException error. For more information about BYOL images, see Bring Your Own Windows Desktop Images.

Type: String

Valid Values: `DEDICATED | SHARED`

Required: No

UserIdentityType

The type of identity management the user is using.

Type: String

Valid Values: `CUSTOMER_MANAGED | AWS_DIRECTORY_SERVICE | AWS_IAM_IDENTITY_CENTER`

Required: No

WorkspaceDirectoryDescription

Description of the directory to register.

Type: String

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]{1,255}$`

Required: No

WorkspaceDirectoryName

The name of the directory to register.

Type: String

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

WorkspaceType

Indicates whether the directory's WorkSpace type is personal or pools.

Type: String

Valid Values: `PERSONAL | POOLS`

Required: No

Response Syntax

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

Response Elements

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

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

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

State

The registration status of the WorkSpace directory.

Type: String

Valid Values: `REGISTERING | REGISTERED | DEREGISTERING | DEREGISTERED | ERROR`

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

UnsupportedNetworkConfigurationException

The configuration of this network is not supported for this operation, or your network configuration conflicts with the Amazon WorkSpaces management network IP range. For more information, see Configure a VPC for Amazon WorkSpaces.

HTTP Status Code: 400

WorkspacesDefaultRoleNotFoundException

The workspaces_DefaultRole role could not be found. If this is the first time you are registering a directory, you will need to create the workspaces_DefaultRole role before you can register a directory. For more information, see Creating the workspaces_DefaultRole Role.

HTTP Status Code: 400

See Also

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

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

RejectAccountLinkInvitation

Rejects the account link invitation.

Request Syntax

```
{
   "ClientToken": "string",
   "LinkId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

The client token of the account link invitation to reject.

Type: String

Pattern: `^.{1,64}$`

Required: No

LinkId

The identifier of the account link

Type: String

Pattern: `^link-.{8,24}$`

Required: Yes

Response Syntax

```
{
   "AccountLink": {
      "AccountLinkId": "string",
      "AccountLinkStatus": "string",
```

```
        "SourceAccountId": "string",
        "TargetAccountId": "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.

AccountLink

Information about the account link.

Type: AccountLink object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The `TargetAccountId` is already linked or invited.

HTTP Status Code: 400

InternalServerException

Unexpected server error occured.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

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

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

RestoreWorkspace

Restores the specified WorkSpace to its last known healthy state.

You cannot restore a WorkSpace unless its state is `AVAILABLE`, `ERROR`, `UNHEALTHY`, or `STOPPED`.

Restoring a WorkSpace is a potentially destructive action that can result in the loss of data. For more information, see Restore a WorkSpace.

This operation is asynchronous and returns before the WorkSpace is completely restored.

Request Syntax

```
{
   "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

RevokeIpRules

Removes one or more rules from the specified IP access control group.

Request Syntax

```
{
   "GroupId": "string",
   "UserRules": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

The rules to remove from the group.

Type: Array of strings

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

StartWorkspaces

Starts the specified WorkSpaces.

You cannot start a WorkSpace unless it has a running mode of `AutoStop` or `Manual` and a state of `STOPPED`.

Request Syntax

```
{
   "StartWorkspaceRequests": [
      {
         "WorkspaceId": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

StartWorkspaceRequests

The WorkSpaces to start. You can specify up to 25 WorkSpaces.

Type: Array of StartRequest objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "WorkspaceId": "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.

FailedRequests

Information about the WorkSpaces that could not be started.

Type: Array of FailedWorkspaceChangeRequest objects

Errors

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

See Also

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

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

StartWorkspacesPool

Starts the specified pool.

You cannot start a pool unless it has a running mode of `AutoStop` and a state of `STOPPED`.

Request Syntax

```
{
   "PoolId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++

- AWS SDK for Go 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

StopWorkspaces

Stops the specified WorkSpaces.

You cannot stop a WorkSpace unless it has a running mode of `AutoStop` or `Manual` and a state of `AVAILABLE`, `IMPAIRED`, `UNHEALTHY`, or `ERROR`.

Request Syntax

```
{
   "StopWorkspaceRequests": [
      {
         "WorkspaceId": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

StopWorkspaceRequests

The WorkSpaces to stop. You can specify up to 25 WorkSpaces.

Type: Array of StopRequest objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "WorkspaceId": "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.

FailedRequests

Information about the WorkSpaces that could not be stopped.

Type: Array of FailedWorkspaceChangeRequest objects

Errors

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

See Also

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

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

StopWorkspacesPool

Stops the specified pool.

You cannot stop a WorkSpace pool unless it has a running mode of `AutoStop` and a state of `AVAILABLE`, `IMPAIRED`, `UNHEALTHY`, or `ERROR`.

Request Syntax

```
{
   "PoolId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

TerminateWorkspaces

Terminates the specified WorkSpaces.

> **Important**
>
> Terminating a WorkSpace is a permanent action and cannot be undone. The user's data is destroyed. If you need to archive any user data, contact Support before terminating the WorkSpace.

You can terminate a WorkSpace that is in any state except `SUSPENDED`.

This operation is asynchronous and returns before the WorkSpaces have been completely terminated. After a WorkSpace is terminated, the `TERMINATED` state is returned only briefly before the WorkSpace directory metadata is cleaned up, so this state is rarely returned. To confirm that a WorkSpace is terminated, check for the WorkSpace ID by using DescribeWorkSpaces. If the WorkSpace ID isn't returned, then the WorkSpace has been successfully terminated.

> **Note**
>
> Simple AD and AD Connector are made available to you free of charge to use with WorkSpaces. If there are no WorkSpaces being used with your Simple AD or AD Connector directory for 30 consecutive days, this directory will be automatically deregistered for use with Amazon WorkSpaces, and you will be charged for this directory as per the AWS Directory Service pricing terms.
> To delete empty directories, see Delete the Directory for Your WorkSpaces. If you delete your Simple AD or AD Connector directory, you can always create a new one when you want to start using WorkSpaces again.

Request Syntax

```
{
   "TerminateWorkspaceRequests": [
      {
         "WorkspaceId": "string"
      }
```

```
    ]
}
```

Request Parameters

The request accepts the following data in JSON format.

TerminateWorkspaceRequests

The WorkSpaces to terminate. You can specify up to 25 WorkSpaces.

Type: Array of TerminateRequest objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
   "FailedRequests": [
      {
         "ErrorCode": "string",
         "ErrorMessage": "string",
         "WorkspaceId": "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.

FailedRequests

Information about the WorkSpaces that could not be terminated.

Type: Array of FailedWorkspaceChangeRequest objects

Errors

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

See Also

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

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

TerminateWorkspacesPool

Terminates the specified pool.

Request Syntax

```
{
   "PoolId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

TerminateWorkspacesPoolSession

Terminates the pool session.

Request Syntax

```
{
   "SessionId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

SessionId

The identifier of the pool session.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

UpdateConnectClientAddIn

Updates a Amazon Connect client add-in. Use this action to update the name and endpoint URL of a Amazon Connect client add-in.

Request Syntax

```
{
   "AddInId": "string",
   "Name": "string",
   "ResourceId": "string",
   "URL": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AddInId

The identifier of the client add-in to update.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

Name

The name of the client add-in.

Type: String

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

Pattern: `^.*$`

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

URL

The endpoint URL of the Amazon Connect client add-in.

Type: String

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

Pattern: `^(http|https)\://\S+`

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

UpdateConnectionAliasPermission

Shares or unshares a connection alias with one account by specifying whether that account has permission to associate the connection alias with a directory. If the association permission is granted, the connection alias is shared with that account. If the association permission is revoked, the connection alias is unshared with the account. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Note

- Before performing this operation, call DescribeConnectionAliases to make sure that the current state of the connection alias is `CREATED`.
- To delete a connection alias that has been shared, the shared account must first disassociate the connection alias from any directories it has been associated with. Then you must unshare the connection alias from the account it has been shared with. You can delete a connection alias only after it is no longer shared with any accounts or associated with any directories.

Request Syntax

```
{
   "AliasId": "string",
   "ConnectionAliasPermission": {
      "AllowAssociation": boolean,
      "SharedAccountId": "string"
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias that you want to update permissions for.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

ConnectionAliasPermission

Indicates whether to share or unshare the connection alias with the specified AWS account.

Type: ConnectionAliasPermission object

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

UpdateRulesOfIpGroup

Replaces the current rules of the specified IP access control group with the specified rules.

Request Syntax

```
{
   "GroupId": "string",
   "UserRules": [
      {
         "ipRule": "string",
         "ruleDesc": "string"
      }
   ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

One or more rules.

Type: Array of IpRuleItem objects

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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

UpdateWorkspaceBundle

Updates a WorkSpace bundle with a new image. For more information about updating WorkSpace bundles, see Update a Custom WorkSpaces Bundle.

> **Important**
>
> Existing WorkSpaces aren't automatically updated when you update the bundle that they're based on. To update existing WorkSpaces that are based on a bundle that you've updated, you must either rebuild the WorkSpaces or delete and recreate them.

Request Syntax

```
{
   "BundleId": "string",
   "ImageId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

UpdateWorkspaceImagePermission

Shares or unshares an image with one account in the same AWS Region by specifying whether that account has permission to copy the image. If the copy image permission is granted, the image is shared with that account. If the copy image permission is revoked, the image is unshared with the account.

After an image has been shared, the recipient account can copy the image to other Regions as needed.

In the China (Ningxia) Region, you can copy images only within the same Region.

In AWS GovCloud (US), to copy images to and from other Regions, contact Support.

For more information about sharing images, see Share or Unshare a Custom WorkSpaces Image.

> **Note**
>
> - To delete an image that has been shared, you must unshare the image before you delete it.
> - Sharing Bring Your Own License (BYOL) images across AWS accounts isn't supported at this time in AWS GovCloud (US). To share BYOL images across accounts in AWS GovCloud (US), contact Support.

Request Syntax

```
{
   "AllowCopyImage": boolean,
   "ImageId": "string",
   "SharedAccountId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AllowCopyImage

The permission to copy the image. This permission can be revoked only after an image has been shared.

Type: Boolean

Required: Yes

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

SharedAccountId

The identifier of the AWS account to share or unshare the image with.

> **Important**
> Before sharing the image, confirm that you are sharing to the correct AWS account ID.

Type: String

Pattern: `^\d{12}$`

Required: Yes

Response Elements

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

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

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

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

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

UpdateWorkspacesPool

Updates the specified pool.

Request Syntax

```
{
   "ApplicationSettings": {
      "SettingsGroup": "string",
      "Status": "string"
   },
   "BundleId": "string",
   "Capacity": {
      "DesiredUserSessions": number
   },
   "Description": "string",
   "DirectoryId": "string",
   "PoolId": "string",
   "RunningMode": "string",
   "TimeoutSettings": {
      "DisconnectTimeoutInSeconds": number,
      "IdleDisconnectTimeoutInSeconds": number,
      "MaxUserDurationInSeconds": number
   }
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationSettings

The persistent application settings for users in the pool.

Type: ApplicationSettingsRequest object

Required: No

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Capacity

The desired capacity for the pool.

Type: Capacity object

Required: No

Description

Describes the specified pool to update.

Type: String

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

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

Required: No

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

PoolId

The identifier of the specified pool to update.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

RunningMode

The desired running mode for the pool. The running mode can only be updated when the pool is in a stopped state.

Type: String

Valid Values: `AUTO_STOP | ALWAYS_ON`

Required: No

TimeoutSettings

Indicates the timeout settings of the specified pool.

Type: TimeoutSettings object

Required: No

Response Syntax

```
{
   "WorkspacesPool": {
      "ApplicationSettings": {
         "S3BucketName": "string",
         "SettingsGroup": "string",
         "Status": "string"
      },
      "BundleId": "string",
      "CapacityStatus": {
         "ActiveUserSessions": number,
         "ActualUserSessions": number,
         "AvailableUserSessions": number,
         "DesiredUserSessions": number
      },
      "CreatedAt": number,
      "Description": "string",
      "DirectoryId": "string",
      "Errors": [
         {
            "ErrorCode": "string",
            "ErrorMessage": "string"
         }
      ],
```

```
        "PoolArn": "string",
        "PoolId": "string",
        "PoolName": "string",
        "RunningMode": "string",
        "State": "string",
        "TimeoutSettings": {
           "DisconnectTimeoutInSeconds": number,
           "IdleDisconnectTimeoutInSeconds": number,
           "MaxUserDurationInSeconds": number
        }
    }
}
```

Response Elements

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

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

WorkspacesPool

Describes the specified pool.

Type: WorkspacesPool object

Errors

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

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go 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 WorkSpaces 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:

- AccessEndpoint
- AccessEndpointConfig
- AccountLink
- AccountModification
- ActiveDirectoryConfig
- ApplicationResourceAssociation
- ApplicationSettingsRequest
- ApplicationSettingsResponse
- AssociationStateReason
- BundleResourceAssociation
- Capacity
- CapacityStatus
- CertificateBasedAuthProperties
- ClientProperties
- ClientPropertiesResult
- ComputeType
- ConnectClientAddIn
- ConnectionAlias
- ConnectionAliasAssociation
- ConnectionAliasPermission

- CustomWorkspaceImageImportErrorDetails
- DataReplicationSettings
- DefaultClientBrandingAttributes
- DefaultImportClientBrandingAttributes
- DefaultWorkspaceCreationProperties
- DescribeWorkspaceDirectoriesFilter
- DescribeWorkspacesPoolsFilter
- ErrorDetails
- FailedCreateStandbyWorkspacesRequest
- FailedCreateWorkspaceRequest
- FailedWorkspaceChangeRequest
- GlobalAcceleratorForDirectory
- GlobalAcceleratorForWorkSpace
- IDCConfig
- ImagePermission
- ImageResourceAssociation
- ImageSourceIdentifier
- IosClientBrandingAttributes
- IosImportClientBrandingAttributes
- IpRuleItem
- MicrosoftEntraConfig
- ModificationState
- NetworkAccessConfiguration
- OperatingSystem
- PendingCreateStandbyWorkspacesRequest
- RebootRequest
- RebuildRequest
- RelatedWorkspaceProperties
- RootStorage
- SamlProperties

- SelfservicePermissions
- Snapshot
- StandbyWorkspace
- StandbyWorkspacesProperties
- StartRequest
- StopRequest
- StorageConnector
- StreamingProperties
- Tag
- TerminateRequest
- TimeoutSettings
- UpdateResult
- UserSetting
- UserStorage
- Workspace
- WorkspaceAccessProperties
- WorkSpaceApplication
- WorkSpaceApplicationDeployment
- WorkspaceBundle
- WorkspaceConnectionStatus
- WorkspaceCreationProperties
- WorkspaceDirectory
- WorkspaceImage
- WorkspaceProperties
- WorkspaceRequest
- WorkspaceResourceAssociation
- WorkspacesIpGroup
- WorkspacesPool
- WorkspacesPoolError
- WorkspacesPoolSession

AccessEndpoint

Describes the access type and endpoint for a WorkSpace.

Contents

AccessEndpointType

Indicates the type of access endpoint.

Type: String

Valid Values: `STREAMING_WSP`

Required: No

VpcEndpointId

Indicates the VPC endpoint to use for access.

Type: String

Pattern: `^[a-zA-Z0-9\_\-]{1,1000}$`

Required: No

See Also

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

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

AccessEndpointConfig

Describes the access endpoint configuration for a WorkSpace.

Contents

AccessEndpoints

Indicates a list of access endpoints associated with this directory.

Type: Array of AccessEndpoint objects

Required: Yes

InternetFallbackProtocols

Indicates a list of protocols that fallback to using the public Internet when streaming over a VPC endpoint is not available.

Type: Array of strings

Valid Values: `PCOIP`

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

AccountLink

Information about about the account link.

Contents

AccountLinkId

The identifier of the account link.

Type: String

Pattern: `^link-.{8,24}$`

Required: No

AccountLinkStatus

The status of the account link.

Type: String

Valid Values: `LINKED | LINKING_FAILED | LINK_NOT_FOUND | PENDING_ACCEPTANCE_BY_TARGET_ACCOUNT | REJECTED`

Required: No

SourceAccountId

The identifier of the source account.

Type: String

Pattern: `^\d{12}$`

Required: No

TargetAccountId

The identifier of the target account.

Type: String

Pattern: `^\d{12}$`

Required: No

See Also

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

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

AccountModification

Describes a modification to the configuration of Bring Your Own License (BYOL) for the specified account.

Contents

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, for the management network interface used for the account.

Type: String

Pattern: `(^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$`

Required: No

DedicatedTenancySupport

The status of BYOL (whether BYOL is being enabled or disabled).

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

ErrorCode

The error code that is returned if the configuration of BYOL cannot be modified.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the configuration of BYOL cannot be modified.

Type: String

Required: No

ModificationState

The state of the modification to the configuration of BYOL.

Type: String

Valid Values: `PENDING | COMPLETED | FAILED`

Required: No

StartTime

The timestamp when the modification of the BYOL configuration was started.

Type: Timestamp

Required: No

See Also

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

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

ActiveDirectoryConfig

Information about the Active Directory config.

Contents

DomainName

The name of the domain.

Type: String

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

Required: Yes

ServiceAccountSecretArn

Indicates the secret ARN on the service account.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:secretsmanager:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:secret:[A-Za-z0-9][A-za-z0-9_/.-]{8,519}$`

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

ApplicationResourceAssociation

Describes the association between an application and an application resource.

Contents

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resource.

Type: String

Valid Values: `WORKSPACE | BUNDLE | IMAGE`

Required: No

Created

The time the association was created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the application resource association.

Type: String

Valid Values: `PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED`

Required: No

StateReason

The reason the association deployment failed.

Type: AssociationStateReason 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

ApplicationSettingsRequest

The persistent application settings for WorkSpaces Pools users.

Contents

Status

Enables or disables persistent application settings for users during their pool sessions.

Type: String

Valid Values: `DISABLED | ENABLED`

Required: Yes

SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored. You can allow the same persistent application settings to be used across multiple pools by specifying the same settings group for each pool.

Type: String

Length Constraints: Maximum length of 100.

Pattern: `^[A-Za-z0-9_./()!*'-]+$`

Required: No

See Also

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

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

ApplicationSettingsResponse

Describes the persistent application settings for WorkSpaces Pools users.

Contents

Status

Specifies whether persistent application settings are enabled for users during their pool sessions.

Type: String

Valid Values: `DISABLED | ENABLED`

Required: Yes

S3BucketName

The S3 bucket where users' persistent application settings are stored. When persistent application settings are enabled for the first time for an account in an AWS Region, an S3 bucket is created. The bucket is unique to the AWS account and the Region.

Type: String

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

Pattern: `^[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9]$`

Required: No

SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored.

Type: String

Length Constraints: Maximum length of 100.

Pattern: `^[A-Za-z0-9_./()!*'-]+$`

Required: No

See Also

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

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

AssociationStateReason

Indicates the reason that the association deployment failed, including the error code and error message.

Contents

ErrorCode

The error code of the association deployment failure.

Type: String

Valid Values: `ValidationError.InsufficientDiskSpace | ValidationError.InsufficientMemory | ValidationError.UnsupportedOperatingSystem | DeploymentError.InternalServerError | DeploymentError.WorkspaceUnreachable`

Required: No

ErrorMessage

The error message of the association deployment failure.

Type: String

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

Required: No

See Also

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

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

BundleResourceAssociation

Describes the association between an application and a bundle resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resources.

Type: String

Valid Values: `APPLICATION`

Required: No

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the bundle resource association.

Type: String

Valid Values: `PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED`

Required: No

StateReason

The reason the association deployment failed.

Type: AssociationStateReason 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

Capacity

Describes the user capacity for a pool of WorkSpaces.

Contents

DesiredUserSessions

The desired number of user sessions for the WorkSpaces in the pool.

Type: Integer

Valid Range: Minimum value of 0.

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

CapacityStatus

Describes the capacity status for a pool of WorkSpaces.

Contents

ActiveUserSessions

The number of user sessions currently being used for your pool.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

ActualUserSessions

The total number of user sessions that are available for streaming or are currently streaming in your pool.

ActualUserSessions = AvailableUserSessions + ActiveUserSessions

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

AvailableUserSessions

The number of user sessions currently available for streaming from your pool.

AvailableUserSessions = ActualUserSessions - ActiveUserSessions

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

DesiredUserSessions

The total number of sessions slots that are either running or pending. This represents the total number of concurrent streaming sessions your pool can support in a steady state.

Type: Integer

Valid Range: Minimum value of 0.

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

CertificateBasedAuthProperties

Describes the properties of the certificate-based authentication you want to use with your WorkSpaces.

Contents

CertificateAuthorityArn

The Amazon Resource Name (ARN) of the AWS Certificate Manager Private CA resource.

Type: String

Length Constraints: Minimum length of 5. Maximum length of 200.

Pattern: `arn:[\w+=/,.@-]+:[\w+=/,.@-]+:[\w+=/,.@-]*:[0-9]*:[\w+=,.@-]+(/[\w+=,.@-]+)*`

Required: No

Status

The status of the certificate-based authentication properties.

Type: String

Valid Values: `DISABLED | ENABLED`

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

ClientProperties

Describes an Amazon WorkSpaces client.

Contents

LogUploadEnabled

Specifies whether users can upload diagnostic log files of Amazon WorkSpaces client directly to WorkSpaces to troubleshoot issues when using the WorkSpaces client. When enabled, the log files will be sent to WorkSpaces automatically and will be applied to all users in the specified directory.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

ReconnectEnabled

Specifies whether users can cache their credentials on the Amazon WorkSpaces client. When enabled, users can choose to reconnect to their WorkSpaces without re-entering their credentials.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

See Also

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

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

ClientPropertiesResult

Information about the Amazon WorkSpaces client.

Contents

ClientProperties

Information about the Amazon WorkSpaces client.

Type: ClientProperties object

Required: No

ResourceId

The resource identifier, in the form of a directory ID.

Type: String

Length Constraints: Minimum length of 1.

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

ComputeType

Describes the compute type of the bundle.

Contents

Name

The compute type.

Type: String

Valid Values: `VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GENERALPURPOSE_4XLARGE | GENERALPURPOSE_8XLARGE | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN`

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

ConnectClientAddIn

Describes an Amazon Connect client add-in.

Contents

AddInId

The client add-in identifier.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

Name

The name of the client add in.

Type: String

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

Pattern: `^.*$`

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

URL

The endpoint URL of the client add-in.

Type: String

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

Pattern: `^(http|https)\://\S+`

Required: No

See Also

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

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

ConnectionAlias

Describes a connection alias. Connection aliases are used for cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Contents

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: No

Associations

The association status of the connection alias.

Type: Array of ConnectionAliasAssociation objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

ConnectionString

The connection string specified for the connection alias. The connection string must be in the form of a fully qualified domain name (FQDN), such as `www.example.com`.

Type: String

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

Pattern: `^[.0-9a-zA-Z\-]{1,255}$`

Required: No

OwnerAccountId

The identifier of the AWS account that owns the connection alias.

Type: String

Pattern: `^\d{12}$`

Required: No

State

The current state of the connection alias.

Type: String

Valid Values: `CREATING | CREATED | DELETING`

Required: No

See Also

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

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

ConnectionAliasAssociation

Describes a connection alias association that is used for cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Contents

AssociatedAccountId

The identifier of the AWS account that associated the connection alias with a directory.

Type: String

Pattern: `^\d{12}$`

Required: No

AssociationStatus

The association status of the connection alias.

Type: String

Valid Values: `NOT_ASSOCIATED | ASSOCIATED_WITH_OWNER_ACCOUNT | ASSOCIATED_WITH_SHARED_ACCOUNT | PENDING_ASSOCIATION | PENDING_DISASSOCIATION`

Required: No

ConnectionIdentifier

The identifier of the connection alias association. You use the connection identifier in the DNS TXT record when you're configuring your DNS routing policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[a-zA-Z0-9]+$`

Required: No

ResourceId

The identifier of the directory associated with a connection alias.

Type: String

Length Constraints: Minimum length of 1.

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

ConnectionAliasPermission

Describes the permissions for a connection alias. Connection aliases are used for cross-Region redirection. For more information, see Cross-Region Redirection for Amazon WorkSpaces.

Contents

AllowAssociation

Indicates whether the specified AWS account is allowed to associate the connection alias with a directory.

Type: Boolean

Required: Yes

SharedAccountId

The identifier of the AWS account that the connection alias is shared with.

Type: String

Pattern: `^\d{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

CustomWorkspaceImageImportErrorDetails

Describes in-depth details about the error. These details include the possible causes of the error and troubleshooting information.

Contents

ErrorCode

The error code that is returned for the image import.

Type: String

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

Required: No

ErrorMessage

The text of the error message that is returned for the image import.

Type: String

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

Required: No

See Also

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

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

DataReplicationSettings

Describes the data replication settings.

Contents

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: `NO_REPLICATION | PRIMARY_AS_SOURCE`

Required: No

RecoverySnapshotTime

The date and time at which the last successful snapshot was taken of the primary WorkSpace used for replicating data.

Type: Timestamp

Required: No

See Also

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

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

DefaultClientBrandingAttributes

Returns default client branding attributes that were imported. These attributes display on the client login screen.

> **Important**
>
> Client branding attributes are public facing. Ensure that you don't include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: `a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul`.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

LogoUrl

The logo. The only image format accepted is a binary data object that is converted from a `.png` file.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

SupportEmail

The support email. The company's customer support email address.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
> - The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their WorkSpace.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive.You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

See Also

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

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

DefaultImportClientBrandingAttributes

The default client branding attributes to be imported. These attributes display on the client login screen.

> **Important**
>
> Client branding attributes are public facing. Ensure that you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:/\/\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: `a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul`.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo

The logo. The only image format accepted is a binary data object that is converted from a `.png` file.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1500000.

Required: No

SupportEmail

The support email. The company's customer support email address.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
> - The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their WorkSpace.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

See Also

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

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

DefaultWorkspaceCreationProperties

Describes the default values that are used to create WorkSpaces. For more information, see Update Directory Details for Your WorkSpaces.

Contents

CustomSecurityGroupId

The identifier of the default security group to apply to WorkSpaces when they are created. For more information, see Security Groups for Your WorkSpaces.

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

DefaultOu

The organizational unit (OU) in the directory for the WorkSpace machine accounts.

Type: String

Required: No

EnableInternetAccess

Specifies whether to automatically assign an Elastic public IP address to WorkSpaces in this directory by default. If enabled, the Elastic public IP address allows outbound internet access from your WorkSpaces when you're using an internet gateway in the Amazon VPC in which your WorkSpaces are located. If you're using a Network Address Translation (NAT) gateway for outbound internet access from your VPC, or if your WorkSpaces are in public subnets and you manually assign them Elastic IP addresses, you should disable this setting. This setting applies to new WorkSpaces that you launch or to existing WorkSpaces that you rebuild. For more information, see Configure a VPC for Amazon WorkSpaces.

Type: Boolean

Required: No

EnableMaintenanceMode

Specifies whether maintenance mode is enabled for WorkSpaces. For more information, see WorkSpace Maintenance.

Type: Boolean

Required: No

InstanceIamRoleArn

Indicates the IAM role ARN of the instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: No

UserEnabledAsLocalAdministrator

Specifies whether WorkSpace users are local administrators on their WorkSpaces.

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

DescribeWorkspaceDirectoriesFilter

Describes the filter conditions for the WorkSpaces to return.

Contents

Name

The name of the WorkSpaces to filter.

Type: String

Valid Values: `USER_IDENTITY_TYPE | WORKSPACE_TYPE`

Required: Yes

Values

The values for filtering WorkSpaces

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^[0-9a-zA-Z\*\.\\/\?-_]{0,64}$`

Required: Yes

See Also

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

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

DescribeWorkspacesPoolsFilter

Describes the filter conditions for WorkSpaces Pools to return.

Contents

Name

The name of the pool to filter.

Type: String

Valid Values: `PoolName`

Required: Yes

Operator

The operator values for filtering WorkSpaces Pools.

Type: String

Valid Values: `EQUALS | NOTEQUALS | CONTAINS | NOTCONTAINS`

Required: Yes

Values

The values for filtering WorkSpaces Pools.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

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

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

Required: Yes

See Also

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

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

ErrorDetails

Describes in-depth details about the error. These details include the possible causes of the error and troubleshooting information.

Contents

ErrorCode

Indicates the error code returned.

Type: String

Valid Values: `OutdatedPowershellVersion | OfficeInstalled | PCoIPAgentInstalled | WindowsUpdatesEnabled | AutoMountDisabled | WorkspacesBYOLAccountNotFound | WorkspacesBYOLAccountDisabled | DHCPDisabled | DiskFreeSpace | AdditionalDrivesAttached | OSNotSupported | DomainJoined | AzureDomainJoined | FirewallEnabled | VMWareToolsInstalled | DiskSizeExceeded | IncompatiblePartitioning | PendingReboot | AutoLogonEnabled | RealTimeUniversalDisabled | MultipleBootPartition | Requires64BitOS | ZeroRearmCount | InPlaceUpgrade | AntiVirusInstalled | UEFINotSupported | UnknownError | AppXPackagesInstalled | ReservedStorageInUse | AdditionalDrivesPresent | WindowsUpdatesRequired | SysPrepFileMissing | UserProfileMissing | InsufficientDiskSpace | EnvironmentVariablesPathMissingEntries | DomainAccountServicesFound | InvalidIp | RemoteDesktopServicesDisabled | WindowsModulesInstallerDisabled | AmazonSsmAgentEnabled | UnsupportedSecurityProtocol | MultipleUserProfiles | StagedAppxPackage | UnsupportedOsUpgrade | InsufficientRearmCount | ProtocolOSIncompatibility | MemoryIntegrityIncompatibility | RestrictedDriveLetterInUse`

Required: No

ErrorMessage

The text of the error message related the error code.

Type: String

Required: No

See Also

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

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

FailedCreateStandbyWorkspacesRequest

Describes the standby WorkSpace that could not be created.

Contents

ErrorCode

The error code that is returned if the standby WorkSpace could not be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the standby WorkSpace could not be created.

Type: String

Required: No

StandbyWorkspaceRequest

Information about the standby WorkSpace that could not be created.

Type: StandbyWorkspace 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

FailedCreateWorkspaceRequest

Describes a WorkSpace that cannot be created.

Contents

ErrorCode

The error code that is returned if the WorkSpace cannot be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the WorkSpace cannot be created.

Type: String

Required: No

WorkspaceRequest

Information about the WorkSpace.

Type: WorkspaceRequest 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

FailedWorkspaceChangeRequest

Describes a WorkSpace that could not be rebooted. (RebootWorkspaces), rebuilt (RebuildWorkspaces), restored (RestoreWorkspace), terminated (TerminateWorkspaces), started (StartWorkspaces), or stopped (StopWorkspaces).

Contents

ErrorCode

The error code that is returned if the WorkSpace cannot be rebooted.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the WorkSpace cannot be rebooted.

Type: String

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

GlobalAcceleratorForDirectory

Describes the Global Accelerator for directory

Contents

Mode

Indicates if Global Accelerator for directory is enabled or disabled.

Type: String

Valid Values: `ENABLED_AUTO | DISABLED`

Required: Yes

PreferredProtocol

Indicates the preferred protocol for Global Accelerator.

Type: String

Valid Values: `TCP | NONE`

Required: No

See Also

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

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

GlobalAcceleratorForWorkSpace

Describes the Global Accelerator for WorkSpaces.

Contents

Mode

Indicates if Global Accelerator for WorkSpaces is enabled, disabled, or the same mode as the associated directory.

Type: String

Valid Values: `ENABLED_AUTO | DISABLED | INHERITED`

Required: Yes

PreferredProtocol

Indicates the preferred protocol for Global Accelerator.

Type: String

Valid Values: `TCP | NONE | INHERITED`

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

IDCConfig

Specifies the configurations of the identity center.

Contents

ApplicationArn

The Amazon Resource Name (ARN) of the application.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: No

InstanceArn

The Amazon Resource Name (ARN) of the identity center instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

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

ImagePermission

Describes the AWS accounts that have been granted permission to use a shared image. For more information about sharing images, see Share or Unshare a Custom WorkSpaces Image.

Contents

SharedAccountId

The identifier of the AWS account that an image has been shared with.

Type: String

Pattern: ^\d{12}$

Required: No

See Also

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

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

ImageResourceAssociation

Describes the association between an application and an image resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resources.

Type: String

Valid Values: `APPLICATION`

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the image resource association.

Type: String

Valid Values: `PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED`

Required: No

StateReason

The reason the association deployment failed.

Type: AssociationStateReason 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

ImageSourceIdentifier

Describes the image import source.

Contents

> **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

Ec2ImageId

The identifier of the EC2 image.

Type: String

Pattern: `^ami\-([a-f0-9]{8}|[a-f0-9]{17})$`

Required: No

Ec2ImportTaskId

The EC2 import task ID to import the image from the Amazon EC2 VM import process.

Type: String

Length Constraints: Minimum length of 19. Maximum length of 28.

Pattern: `^import-ami\-([a-zA-Z0-9]{8}|[a-zA-Z0-9]{17})$`

Required: No

ImageBuildVersionArn

The ARN of the EC2 Image Builder image.

Type: String

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

Pattern: `^arn:aws[^:]*:imagebuilder:[^:]+:(?:[0-9]{12}|aws(?:-[a-z-]+)?):image/[a-z0-9-_]+/(?:(?:([0-9]+|x)\.([0-9]+|x)\.([0-9]+|x))|(?:[0-9]+\.[0-9]+\.[0-9]+/[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

IosClientBrandingAttributes

The client branding attributes for iOS device types. These attributes are displayed on the iOS client login screen only.

> **Important**
>
> Client branding attributes are public facing. Ensure you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: `a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul`.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo2xUrl

The @2x version of the logo. This is the higher resolution display that offers a scale factor of 2.0 (or @2x). The only image format accepted is a binary data object that is converted from a `.`png file.

> **Note**
>
> For more information about iOS image size and resolution, see Image Size and Resolution in the *Apple Human Interface Guidelines*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

Logo3xUrl

The @3x version of the logo. This is the higher resolution display that offers a scale factor of 3.0 (or @3x).The only image format accepted is a binary data object that is converted from a `.`png file.

> **Note**
>
> For more information about iOS image size and resolution, see Image Size and Resolution in the *Apple Human Interface Guidelines*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

LogoUrl

The logo. This is the standard-resolution display that has a 1:1 pixel density (or @1x), where one pixel is equal to one point. The only image format accepted is a binary data object that is converted from a `.png` file.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

SupportEmail

The support email. The company's customer support email address.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
> - The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their WorkSpace.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

See Also

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

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

IosImportClientBrandingAttributes

The client branding attributes to import for iOS device types. These attributes are displayed on the iOS client login screen.

> **Important**
>
> Client branding attributes are public facing. Ensure you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: `a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul`.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo

The logo. This is the standard-resolution display that has a 1:1 pixel density (or @1x), where one pixel is equal to one point. The only image format accepted is a binary data object that is converted from a `.png` file.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 447000.

Required: No

Logo2x

The @2x version of the logo. This is the higher resolution display that offers a scale factor of 2.0 (or @2x). The only image format accepted is a binary data object that is converted from a `.png` file.

> **Note**
>
> For more information about iOS image size and resolution, see Image Size and Resolution in the *Apple Human Interface Guidelines*.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1770000.

Required: No

Logo3x

The @3x version of the logo. This is the higher resolution display that offers a scale factor of 3.0 (or @3x). The only image format accepted is a binary data object that is converted from a `.png` file.

> **Note**
>
> For more information about iOS image size and resolution, see Image Size and Resolution in the *Apple Human Interface Guidelines*.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1770000.

Required: No

SupportEmail

The support email. The company's customer support email address.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
> - The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their WorkSpace.

> **Note**
>
> - In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
> - The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\://\S+`

Required: No

See Also

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

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

IpRuleItem

Describes a rule for an IP access control group.

Contents

ipRule

The IP address range, in CIDR notation.

Type: String

Required: No

ruleDesc

The description.

Type: String

Required: No

See Also

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

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

MicrosoftEntraConfig

Specifies the configurations of the Microsoft Entra.

Contents

ApplicationConfigSecretArn

The Amazon Resource Name (ARN) of the application config.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:secretsmanager:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:secret:[A-Za-z0-9][A-za-z0-9_/.-]{8,519}$`

Required: No

TenantId

The identifier of the tenant.

Type: String

Pattern: `^[a-zA-Z0-9-]{1,100}$`

Required: No

See Also

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

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

ModificationState

Describes a WorkSpace modification.

Contents

Resource

The resource.

Type: String

Valid Values: `ROOT_VOLUME | USER_VOLUME | COMPUTE_TYPE`

Required: No

State

The modification state.

Type: String

Valid Values: `UPDATE_INITIATED | UPDATE_IN_PROGRESS`

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

NetworkAccessConfiguration

Describes the network details of a WorkSpaces Pool.

Contents

EniId

The resource identifier of the elastic network interface that is attached to instances in your VPC. All network interfaces have the eni-xxxxxxxx resource identifier.

Type: String

Length Constraints: Minimum length of 1.

Required: No

EniPrivateIpAddress

The private IP address of the elastic network interface that is attached to instances in your VPC.

Type: String

Length Constraints: Minimum length of 1.

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

OperatingSystem

The operating system that the image is running.

Contents

Type

The operating system.

Type: String

Valid Values: `WINDOWS | LINUX`

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

PendingCreateStandbyWorkspacesRequest

Information about the standby WorkSpace.

Contents

DirectoryId

The identifier of the directory for the standby WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

State

The operational state of the standby WorkSpace.

Type: String

Valid Values: `PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR`

Required: No

UserName

Describes the standby WorkSpace that was created.

Because this operation is asynchronous, the identifier returned is not immediately available for use with other operations. For example, if you call DescribeWorkspaces before the WorkSpace is created, the information returned can be incomplete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

WorkspaceId

The identifier of the standby WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

RebootRequest

Describes the information used to reboot a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

RebuildRequest

Describes the information used to rebuild a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

RelatedWorkspaceProperties

Describes the related WorkSpace. The related WorkSpace could be a standby WorkSpace or primary WorkSpace related to the specified WorkSpace.

Contents

Region

The Region of the related WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: No

State

Indicates the state of the WorkSpace.

Type: String

Valid Values: `PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR`

Required: No

Type

Indicates the type of WorkSpace.

Type: String

Valid Values: `PRIMARY | STANDBY`

Required: No

WorkspaceId

The identifier of the related WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

RootStorage

Describes the root volume for a WorkSpace bundle.

Contents

Capacity

The size of the root volume.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

See Also

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

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

SamlProperties

Describes the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Contents

RelayStateParameterName

The relay state parameter name supported by the SAML 2.0 identity provider (IdP). When the end user is redirected to the user access URL from the WorkSpaces client application, this relay state parameter name is appended as a query parameter to the URL along with the relay state endpoint to return the user to the client application session.

To use SAML 2.0 authentication with WorkSpaces, the IdP must support IdP-initiated deep linking for the relay state URL. Consult your IdP documentation for more information.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Status

Indicates the status of SAML 2.0 authentication. These statuses include the following.

- If the setting is `DISABLED`, end users will be directed to login with their directory credentials.
- If the setting is `ENABLED`, end users will be directed to login via the user access URL. Users attempting to connect to WorkSpaces from a client application that does not support SAML 2.0 authentication will not be able to connect.
- If the setting is `ENABLED_WITH_DIRECTORY_LOGIN_FALLBACK`, end users will be directed to login via the user access URL on supported client applications, but will not prevent clients that do not support SAML 2.0 authentication from connecting as if SAML 2.0 authentication was disabled.

Type: String

Valid Values: `DISABLED | ENABLED | ENABLED_WITH_DIRECTORY_LOGIN_FALLBACK`

Required: No

UserAccessUrl

The SAML 2.0 identity provider (IdP) user access URL is the URL a user would navigate to in their web browser in order to federate from the IdP and directly access the application, without any SAML 2.0 service provider (SP) bindings.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 200.

Pattern: `^(http|https)\://\S+$`

Required: No

See Also

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

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

SelfservicePermissions

Describes the self-service permissions for a directory. For more information, see Enable Self-Service WorkSpace Management Capabilities for Your Users.

Contents

ChangeComputeType

Specifies whether users can change the compute type (bundle) for their WorkSpace.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

IncreaseVolumeSize

Specifies whether users can increase the volume size of the drives on their WorkSpace.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

RebuildWorkspace

Specifies whether users can rebuild the operating system of a WorkSpace to its original state.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

RestartWorkspace

Specifies whether users can restart their WorkSpace.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

SwitchRunningMode

Specifies whether users can switch the running mode of their WorkSpace.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: No

See Also

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

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

Snapshot

Describes a snapshot.

Contents

SnapshotTime

The time when the snapshot was created.

Type: Timestamp

Required: No

See Also

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

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

StandbyWorkspace

Describes a standby WorkSpace.

Contents

DirectoryId

The identifier of the directory for the standby WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PrimaryWorkspaceId

The identifier of the standby WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: `NO_REPLICATION | PRIMARY_AS_SOURCE`

Required: No

Tags

The tags associated with the standby WorkSpace.

Type: Array of Tag objects

Required: No

VolumeEncryptionKey

The volume encryption key of the standby WorkSpace.

Type: String

Required: No

See Also

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

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

StandbyWorkspacesProperties

Describes the properties of the related standby WorkSpaces.

Contents

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: `NO_REPLICATION | PRIMARY_AS_SOURCE`

Required: No

RecoverySnapshotTime

The date and time at which the last successful snapshot was taken of the primary WorkSpace used for replicating data.

Type: Timestamp

Required: No

StandbyWorkspaceId

The identifier of the standby WorkSpace

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

StartRequest

Information used to start a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

StopRequest

Describes the information used to stop a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

StorageConnector

Describes the storage connector.

Contents

ConnectorType

The type of connector used to save user files.

Type: String

Valid Values: `HOME_FOLDER`

Required: Yes

Status

Indicates if the storage connetor is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

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

StreamingProperties

Describes the streaming properties.

Contents

GlobalAccelerator

Indicates the Global Accelerator properties.

Type: GlobalAcceleratorForDirectory object

Required: No

StorageConnectors

Indicates the storage connector used

Type: Array of StorageConnector objects

Array Members: Minimum number of 1 item.

Required: No

StreamingExperiencePreferredProtocol

Indicates the type of preferred protocol for the streaming experience.

Type: String

Valid Values: `TCP` | `UDP`

Required: No

UserSettings

Indicates the permission settings asscoiated with the user.

Type: Array of UserSetting objects

Array Members: Minimum number of 1 item.

Required: No

See Also

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

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

Tag

Describes a tag.

Contents

Key

The key of the tag.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Required: Yes

Value

The value of the tag.

Type: String

Length Constraints: Maximum length of 255.

Required: No

See Also

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

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

TerminateRequest

Describes the information used to terminate a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

TimeoutSettings

Describes the timeout settings for a pool of WorkSpaces.

Contents

DisconnectTimeoutInSeconds

Specifies the amount of time, in seconds, that a streaming session remains active after users disconnect. If users try to reconnect to the streaming session after a disconnection or network interruption within the time set, they are connected to their previous session. Otherwise, they are connected to a new session with a new streaming instance.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 36000.

Required: No

IdleDisconnectTimeoutInSeconds

The amount of time in seconds a connection will stay active while idle.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 36000.

Required: No

MaxUserDurationInSeconds

Specifies the maximum amount of time, in seconds, that a streaming session can remain active. If users are still connected to a streaming instance five minutes before this limit is reached, they are prompted to save any open documents before being disconnected. After this time elapses, the instance is terminated and replaced by a new instance.

Type: Integer

Valid Range: Minimum value of 600. Maximum value of 432000.

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

UpdateResult

Describes whether a WorkSpace image needs to be updated with the latest drivers and other components required by Amazon WorkSpaces.

> **Note**
>
> Only Windows 10 WorkSpace images can be programmatically updated at this time.

Contents

Description

A description of whether updates for the WorkSpace image are pending or available.

Type: String

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

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

Required: No

UpdateAvailable

Indicates whether updated drivers or other components are available for the specified WorkSpace image.

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

UserSetting

Information about the user's permission settings.

Contents

Action

Indicates the type of action.

Type: String

Valid Values: `CLIPBOARD_COPY_FROM_LOCAL_DEVICE | CLIPBOARD_COPY_TO_LOCAL_DEVICE | PRINTING_TO_LOCAL_DEVICE | SMART_CARD`

Required: Yes

Permission

Indicates if the setting is enabled or disabled.

Type: String

Valid Values: `ENABLED | DISABLED`

Required: Yes

MaximumLength

Indicates the maximum character length for the specified user setting.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

See Also

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

- AWS SDK for C++

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

UserStorage

Describes the user volume for a WorkSpace bundle.

Contents

Capacity

The size of the user volume.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

See Also

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

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

Workspace

Describes a WorkSpace.

Contents

BundleId

The identifier of the bundle used to create the WorkSpace.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

ComputerName

The name of the WorkSpace, as seen by the operating system. The format of this name varies. For more information, see Launch a WorkSpace.

Type: String

Required: No

DataReplicationSettings

Indicates the settings of the data replication.

Type: DataReplicationSettings object

Required: No

DirectoryId

The identifier of the AWS Directory Service directory for the WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

ErrorCode

The error code that is returned if the WorkSpace cannot be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the WorkSpace cannot be created.

Type: String

Required: No

IpAddress

The IP address of the WorkSpace.

Type: String

Required: No

ModificationStates

The modification states of the WorkSpace.

Type: Array of ModificationState objects

Required: No

RelatedWorkspaces

The standby WorkSpace or primary WorkSpace related to the specified WorkSpace.

Type: Array of RelatedWorkspaceProperties objects

Required: No

RootVolumeEncryptionEnabled

Indicates whether the data stored on the root volume is encrypted.

Type: Boolean

Required: No

StandbyWorkspacesProperties

The properties of the standby WorkSpace

Type: Array of StandbyWorkspacesProperties objects

Required: No

State

The operational state of the WorkSpace.

- `PENDING` – The WorkSpace is in a waiting state (for example, the WorkSpace is being created).
- `AVAILABLE` – The WorkSpace is running and has passed the health checks.
- `IMPAIRED` – Refer to `UNHEALTHY` state.
- `UNHEALTHY` – The WorkSpace is not responding to health checks.
- `REBOOTING` – The WorkSpace is being rebooted (restarted).
- `STARTING` – The WorkSpace is starting up and health checks are being run.
- `REBUILDING` – The WorkSpace is being rebuilt.
- `RESTORING` – The WorkSpace is being restored.
- `MAINTENANCE` – The WorkSpace is undergoing scheduled maintenance by AWS.
- `ADMIN_MAINTENANCE` – The WorkSpace is undergoing maintenance by the WorkSpaces administrator.
- `TERMINATING` – The WorkSpace is being deleted.
- `TERMINATED` – The WorkSpace has been deleted.
- `SUSPENDED` – The WorkSpace has been suspended for image creation.
- `UPDATING` – The WorkSpace is undergoing an update.
- `STOPPING` – The WorkSpace is being stopped.
- `STOPPED` – The WorkSpace has been stopped.
- `ERROR` – The WorkSpace is an error state (for example, an error occurred during startup).

> **Note**
>
> After a WorkSpace is terminated, the `TERMINATED` state is returned only briefly before the WorkSpace directory metadata is cleaned up, so this state is rarely returned.

To confirm that a WorkSpace is terminated, check for the WorkSpace ID by using DescribeWorkSpaces. If the WorkSpace ID isn't returned, then the WorkSpace has been successfully terminated.

Type: String

Valid Values: `PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR`

Required: No

SubnetId

The identifier of the subnet for the WorkSpace.

Type: String

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

UserName

The user for the WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

UserVolumeEncryptionEnabled

Indicates whether the data stored on the user volume is encrypted.

Type: Boolean

Required: No

VolumeEncryptionKey

The ARN of the symmetric AWS KMS key used to encrypt data stored on your WorkSpace. Amazon WorkSpaces does not support asymmetric KMS keys.

Type: String

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

WorkspaceName

The name of the user-decoupled WorkSpace.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_.()-]{1,63}$`

Required: No

WorkspaceProperties

The properties of the WorkSpace.

Type: WorkspaceProperties 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

WorkspaceAccessProperties

The device types and operating systems that can be used to access a WorkSpace. For more information, see Amazon WorkSpaces Client Network Requirements.

Contents

AccessEndpointConfig

Specifies the configuration for accessing the WorkSpace.

Type: AccessEndpointConfig object

Required: No

DeviceTypeAndroid

Indicates whether users can use Android and Android-compatible Chrome OS devices to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeChromeOs

Indicates whether users can use Chromebooks to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeIos

Indicates whether users can use iOS devices to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeLinux

Indicates whether users can use Linux clients to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeOsx

Indicates whether users can use macOS clients to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeWeb

Indicates whether users can access their WorkSpaces through a web browser.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeWindows

Indicates whether users can use Windows clients to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeWorkSpacesThinClient

Indicates whether users can access their WorkSpaces through a WorkSpaces Thin Client.

Type: String

Valid Values: `ALLOW` | `DENY`

Required: No

DeviceTypeZeroClient

Indicates whether users can use zero client devices to access their WorkSpaces.

Type: String

Valid Values: `ALLOW` | `DENY`

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

WorkSpaceApplication

Describes the WorkSpace application.

Contents

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

Created

The time the application is created.

Type: Timestamp

Required: No

Description

The description of the WorkSpace application.

Type: String

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

Required: No

LicenseType

The license availability for the applications.

Type: String

Valid Values: `LICENSED | UNLICENSED`

Required: No

Name

The name of the WorkSpace application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Owner

The owner of the WorkSpace application.

Type: String

Pattern: `^\d{12}|AMAZON$`

Required: No

State

The status of WorkSpace application.

Type: String

Valid Values: `PENDING | ERROR | AVAILABLE | UNINSTALL_ONLY`

Required: No

SupportedComputeTypeNames

The supported compute types of the WorkSpace application.

Type: Array of strings

Valid Values: `VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GENERALPURPOSE_4XLARGE | GENERALPURPOSE_8XLARGE | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN`

Required: No

SupportedOperatingSystemNames

The supported operating systems of the WorkSpace application.

Type: Array of strings

Valid Values: `AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8 | ROCKY_8`

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

WorkSpaceApplicationDeployment

Describes the WorkSpace application deployment.

Contents

Associations

The associations between the applications and the associated resources.

Type: Array of WorkspaceResourceAssociation objects

Required: No

See Also

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

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

WorkspaceBundle

Describes a WorkSpace bundle.

Contents

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

BundleType

The type of WorkSpace bundle.

Type: String

Valid Values: `REGULAR | STANDBY`

Required: No

ComputeType

The compute type of the bundle. For more information, see Amazon WorkSpaces Bundles.

Type: ComputeType object

Required: No

CreationTime

The time when the bundle was created.

Type: Timestamp

Required: No

Description

The description of the bundle.

Type: String

Required: No

ImageId

The identifier of the image that was used to create the bundle.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

LastUpdatedTime

The last time that the bundle was updated.

Type: Timestamp

Required: No

Name

The name of the bundle.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Owner

The owner of the bundle. This is the account identifier of the owner, or `AMAZON` if the bundle is provided by AWS.

Type: String

Required: No

RootStorage

The size of the root volume.

Type: RootStorage object

Required: No

State

The state of the WorkSpace bundle.

Type: String

Valid Values: `AVAILABLE | PENDING | ERROR`

Required: No

UserStorage

The size of the user volume.

Type: UserStorage 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

WorkspaceConnectionStatus

Describes the connection status of a WorkSpace.

Contents

ConnectionState

The connection state of the WorkSpace. The connection state is unknown if the WorkSpace is stopped.

Type: String

Valid Values: `CONNECTED | DISCONNECTED | UNKNOWN`

Required: No

ConnectionStateCheckTimestamp

The timestamp of the connection status check.

Type: Timestamp

Required: No

LastKnownUserConnectionTimestamp

The timestamp of the last known user connection.

Type: Timestamp

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

WorkspaceCreationProperties

Describes the default properties that are used for creating WorkSpaces. For more information, see Update Directory Details for Your WorkSpaces.

Contents

CustomSecurityGroupId

The identifier of your custom security group.

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

DefaultOu

The default organizational unit (OU) for your WorkSpaces directories. This string must be the full Lightweight Directory Access Protocol (LDAP) distinguished name for the target domain and OU. It must be in the form `"OU=value,DC=value,DC=value"`, where *value* is any string of characters, and the number of domain components (DCs) is two or more. For example, `OU=WorkSpaces_machines,DC=machines,DC=example,DC=com`.

> **Important**
>
> - To avoid errors, certain characters in the distinguished name must be escaped. For more information, see Distinguished Names in the Microsoft documentation.
> - The API doesn't validate whether the OU exists.

Type: String

Required: No

EnableInternetAccess

Indicates whether internet access is enabled for your WorkSpaces.

Type: Boolean

Required: No

EnableMaintenanceMode

Indicates whether maintenance mode is enabled for your WorkSpaces. For more information, see WorkSpace Maintenance.

Type: Boolean

Required: No

InstanceIamRoleArn

Indicates the IAM role ARN of the instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: No

UserEnabledAsLocalAdministrator

Indicates whether users are local administrators of their WorkSpaces.

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

WorkspaceDirectory

Describes a directory that is used with Amazon WorkSpaces.

Contents

ActiveDirectoryConfig

Information about the Active Directory config.

Type: ActiveDirectoryConfig object

Required: No

Alias

The directory alias.

Type: String

Required: No

CertificateBasedAuthProperties

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory for WorkSpaces login.

Type: CertificateBasedAuthProperties object

Required: No

CustomerUserName

The user name for the service account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

DirectoryId

The directory identifier.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

DirectoryName

The name of the directory.

Type: String

Required: No

DirectoryType

The directory type.

Type: String

Valid Values: `SIMPLE_AD | AD_CONNECTOR | CUSTOMER_MANAGED | AWS_IAM_IDENTITY_CENTER`

Required: No

DnsIpAddresses

The IP addresses of the DNS servers for the directory.

Type: Array of strings

Required: No

EndpointEncryptionMode

Endpoint encryption mode that allows you to configure the specified directory between Standard TLS and FIPS 140-2 validated mode.

Type: String

Valid Values: `STANDARD_TLS | FIPS_VALIDATED`

Required: No

ErrorMessage

The error message returned.

Type: String

Required: No

IamRoleId

The identifier of the IAM role. This is the role that allows Amazon WorkSpaces to make calls to other services, such as Amazon EC2, on your behalf.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: No

IDCConfig

Specifies details about identity center configurations.

Type: IDCConfig object

Required: No

ipGroupIds

The identifiers of the IP access control groups associated with the directory.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

MicrosoftEntraConfig

Specifies details about Microsoft Entra configurations.

Type: MicrosoftEntraConfig object

Required: No

RegistrationCode

The registration code for the directory. This is the code that users enter in their Amazon WorkSpaces client application to connect to the directory.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Required: No

SamlProperties

Describes the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Type: SamlProperties object

Required: No

SelfservicePermissions

The default self-service permissions for WorkSpaces in the directory.

Type: SelfservicePermissions object

Required: No

State

The state of the directory's registration with Amazon WorkSpaces. After a directory is deregistered, the `DEREGISTERED` state is returned very briefly before the directory metadata is cleaned up, so this state is rarely returned. To confirm that a directory is deregistered, check for the directory ID by using DescribeWorkspaceDirectories. If the directory ID isn't returned, then the directory has been successfully deregistered.

Type: String

Valid Values: `REGISTERING | REGISTERED | DEREGISTERING | DEREGISTERED | ERROR`

Required: No

StreamingProperties

The streaming properties to configure.

Type: StreamingProperties object

Required: No

SubnetIds

The identifiers of the subnets used with the directory.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

Tenancy

Specifies whether the directory is dedicated or shared. To use Bring Your Own License (BYOL), this value must be set to `DEDICATED`. For more information, see Bring Your Own Windows Desktop Images.

Type: String

Valid Values: `DEDICATED | SHARED`

Required: No

UserIdentityType

Indicates the identity type of the specifired user.

Type: String

Valid Values: `CUSTOMER_MANAGED | AWS_DIRECTORY_SERVICE | AWS_IAM_IDENTITY_CENTER`

Required: No

WorkspaceAccessProperties

The devices and operating systems that users can use to access WorkSpaces.

Type: WorkspaceAccessProperties object

Required: No

WorkspaceCreationProperties

The default creation properties for all WorkSpaces in the directory.

Type: DefaultWorkspaceCreationProperties object

Required: No

WorkspaceDirectoryDescription

The description of the WorkSpace directory

Type: String

Pattern: `^([a-zA-Z0-9_])[\\a-zA-Z0-9_@#%*+=:?./!\s-]{1,255}$`

Required: No

WorkspaceDirectoryName

The name fo the WorkSpace directory.

Type: String

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

WorkspaceSecurityGroupId

The identifier of the security group that is assigned to new WorkSpaces.

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

WorkspaceType

Indicates whether the directory's WorkSpace type is personal or pools.

Type: String

Valid Values: `PERSONAL` | `POOLS`

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

WorkspaceImage

Describes a WorkSpace image.

Contents

Created

The date when the image was created. If the image has been shared, the AWS account that the image has been shared with sees the original creation date of the image.

Type: Timestamp

Required: No

Description

The description of the image.

Type: String

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

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

Required: No

ErrorCode

The error code that is returned for the image.

Type: String

Required: No

ErrorDetails

Additional details of the error returned for the image, including the possible causes of the errors and troubleshooting information.

Type: Array of ErrorDetails objects

Required: No

ErrorMessage

The text of the error message that is returned for the image.

Type: String

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

Name

The name of the image.

Type: String

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

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

Required: No

OperatingSystem

The operating system that the image is running.

Type: OperatingSystem object

Required: No

OwnerAccountId

The identifier of the AWS account that owns the image.

Type: String

Pattern: `^\d{12}$`

Required: No

RequiredTenancy

Specifies whether the image is running on dedicated hardware. When Bring Your Own License (BYOL) is enabled, this value is set to `DEDICATED`. For more information, see Bring Your Own Windows Desktop Images.

Type: String

Valid Values: `DEFAULT | DEDICATED`

Required: No

State

The status of the image.

Type: String

Valid Values: `AVAILABLE | PENDING | ERROR`

Required: No

Updates

The updates (if any) that are available for the specified image.

Type: UpdateResult 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

WorkspaceProperties

Describes a WorkSpace.

Contents

ComputeTypeName

The compute type. For more information, see Amazon WorkSpaces Bundles.

Type: String

Valid Values: `VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GENERALPURPOSE_4XLARGE | GENERALPURPOSE_8XLARGE | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN`

Required: No

GlobalAccelerator

Indicates the Global Accelerator properties.

Type: GlobalAcceleratorForWorkSpace object

Required: No

OperatingSystemName

The name of the operating system.

Type: String

Valid Values: `AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8 | ROCKY_8`

Required: No

Protocols

The protocol. For more information, see Protocols for Amazon WorkSpaces.

> **Note**
>
> - Only available for WorkSpaces created with PCoIP bundles.

- The `Protocols` property is case sensitive. Ensure you use `PCOIP` or `DCV` (formerly WSP).
- Unavailable for Windows 7 WorkSpaces and WorkSpaces using GPU-based bundles (Graphics, GraphicsPro, Graphics.g4dn, and GraphicsPro.g4dn).

Type: Array of strings

Valid Values: `PCOIP` | `WSP`

Required: No

RootVolumeSizeGib

The size of the root volume. For important information about how to modify the size of the root and user volumes, see Modify a WorkSpace.

Type: Integer

Required: No

RunningMode

The running mode. For more information, see Manage the WorkSpace Running Mode.

> **Note**
>
> The `MANUAL` value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see Amazon WorkSpaces Core.

Review your running mode to ensure you are using one that is optimal for your needs and budget. For more information on switching running modes, see Can I switch between hourly and monthly billing?

Type: String

Valid Values: `AUTO_STOP` | `ALWAYS_ON` | `MANUAL`

Required: No

RunningModeAutoStopTimeoutInMinutes

The time after a user logs off when WorkSpaces are automatically stopped. Configured in 60-minute intervals.

Type: Integer

Required: No

UserVolumeSizeGib

The size of the user storage. For important information about how to modify the size of the root and user volumes, see Modify a WorkSpace.

Type: Integer

Required: No

See Also

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

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

WorkspaceRequest

Describes the information used to create a WorkSpace.

Contents

BundleId

The identifier of the bundle for the WorkSpace. You can use DescribeWorkspaceBundles to list the available bundles.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

DirectoryId

The identifier of the AWS Directory Service directory for the WorkSpace. You can use DescribeWorkspaceDirectories to list the available directories.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

UserName

The user name of the user for the WorkSpace. This user name must exist in the AWS Directory Service directory for the WorkSpace.

The username is not case-sensitive, but we recommend matching the case in the AWS Directory Service directory to avoid potential incompatibilities.

The reserved keyword, `[UNDEFINED]`, is used when creating user-decoupled WorkSpaces.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: Yes

RootVolumeEncryptionEnabled

Indicates whether the data stored on the root volume is encrypted.

Type: Boolean

Required: No

Tags

The tags for the WorkSpace.

Type: Array of Tag objects

Required: No

UserVolumeEncryptionEnabled

Indicates whether the data stored on the user volume is encrypted.

Type: Boolean

Required: No

VolumeEncryptionKey

The ARN of the symmetric AWS KMS key used to encrypt data stored on your WorkSpace. Amazon WorkSpaces does not support asymmetric KMS keys.

Type: String

Required: No

WorkspaceName

The name of the user-decoupled WorkSpace.

> **Note**
>
> `WorkspaceName` is required if `UserName` is `[UNDEFINED]` for user-decoupled WorkSpaces. `WorkspaceName` is not applicable if `UserName` is specified for user-assigned WorkSpaces.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_.()-]{1,63}$`

Required: No

WorkspaceProperties

The WorkSpace properties.

Type: WorkspaceProperties 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

WorkspaceResourceAssociation

Describes the association between an application and a WorkSpace resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource types of the associated resource.

Type: String

Valid Values: `APPLICATION`

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the WorkSpace resource association.

Type: String

Valid Values: `PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED`

Required: No

StateReason

The reason the association deployment failed.

Type: AssociationStateReason object

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

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

WorkspacesIpGroup

Describes an IP access control group.

Contents

groupDesc

The description of the group.

Type: String

Required: No

groupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

groupName

The name of the group.

Type: String

Required: No

userRules

The rules.

Type: Array of IpRuleItem objects

Required: No

See Also

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

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

WorkspacesPool

Describes a pool of WorkSpaces.

Contents

BundleId

The identifier of the bundle used by the pool.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

CapacityStatus

The capacity status for the pool

Type: CapacityStatus object

Required: Yes

CreatedAt

The time the pool was created.

Type: Timestamp

Required: Yes

DirectoryId

The identifier of the directory used by the pool.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PoolArn

The Amazon Resource Name (ARN) for the pool.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-za-z0-9_/.-]{0,62}:[A-za-z0-9_/.-]{0,63}:[A-za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.\\-]{0,1023}$`

Required: Yes

PoolId

The identifier of a pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

PoolName

The name of the pool.

Type: String

Pattern: `^[A-Za-z0-9][A-Za-z0-9_.-]{0,63}$`

Required: Yes

RunningMode

The running mode of the pool.

Type: String

Valid Values: `AUTO_STOP | ALWAYS_ON`

Required: Yes

State

The current state of the pool.

Type: String

Valid Values: `CREATING | DELETING | RUNNING | STARTING | STOPPED | STOPPING | UPDATING`

Required: Yes

ApplicationSettings

The persistent application settings for users of the pool.

Type: ApplicationSettingsResponse object

Required: No

Description

The description of the pool.

Type: String

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

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

Required: No

Errors

The pool errors.

Type: Array of WorkspacesPoolError objects

Required: No

TimeoutSettings

The amount of time that a pool session remains active after users disconnect. If they try to reconnect to the pool session after a disconnection or network interruption within this time interval, they are connected to their previous session. Otherwise, they are connected to a new session with a new pool instance.

Type: TimeoutSettings 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

WorkspacesPoolError

Describes a pool error.

Contents

ErrorCode

The error code.

Type: String

Valid Values: `IAM_SERVICE_ROLE_IS_MISSING | IAM_SERVICE_ROLE_MISSING_ENI_DESCRIBE_ACTION | IAM_SERVICE_ROLE_MISSING_ENI_CREATE_ACTION | IAM_SERVICE_ROLE_MISSING_ENI_DELETE_ACTION | NETWORK_INTERFACE_LIMIT_EXCEEDED | INTERNAL_SERVICE_ERROR | MACHINE_ROLE_IS_MISSING | STS_DISABLED_IN_REGION | SUBNET_HAS_INSUFFICIENT_IP_ADDRESSES | IAM_SERVICE_ROLE_MISSING_DESCRIBE_SUBNET_ACTION | SUBNET_NOT_FOUND | IMAGE_NOT_FOUND | INVALID_SUBNET_CONFIGURATION | SECURITY_GROUPS_NOT_FOUND | IGW_NOT_ATTACHED | IAM_SERVICE_ROLE_MISSING_DESCRIBE_SECURITY_GROUPS_ACTION | WORKSPACES_POOL_STOPPED | WORKSPACES_POOL_INSTANCE_PROVISIONING_FAILURE | DOMAIN_JOIN_ERROR_FILE_NOT_FOUND | DOMAIN_JOIN_ERROR_ACCESS_DENIED | DOMAIN_JOIN_ERROR_LOGON_FAILURE | DOMAIN_JOIN_ERROR_INVALID_PARAMETER | DOMAIN_JOIN_ERROR_MORE_DATA | DOMAIN_JOIN_ERROR_NO_SUCH_DOMAIN | DOMAIN_JOIN_ERROR_NOT_SUPPORTED | DOMAIN_JOIN_NERR_INVALID_WORKGROUP_NAME | DOMAIN_JOIN_NERR_WORKSTATION_NOT_STARTED | DOMAIN_JOIN_ERROR_DS_MACHINE_ACCOUNT_QUOTA_EXCEEDED | DOMAIN_JOIN_NERR_PASSWORD_EXPIRED | DOMAIN_JOIN_INTERNAL_SERVICE_ERROR | DOMAIN_JOIN_ERROR_SECRET_ACTION_PERMISSION_IS_MISSING | DOMAIN_JOIN_ERROR_SECRET_DECRYPTION_FAILURE | DOMAIN_JOIN_ERROR_SECRET_STATE_INVALID | DOMAIN_JOIN_ERROR_SECRET_NOT_FOUND | DOMAIN_JOIN_ERROR_SECRET_VALUE_KEY_NOT_FOUND | DOMAIN_JOIN_ERROR_SECRET_INVALID | BUNDLE_NOT_FOUND |`

```
DIRECTORY_NOT_FOUND | INSUFFICIENT_PERMISSIONS_ERROR |
DEFAULT_OU_IS_MISSING
```

Required: No

ErrorMessage

The error message.

Type: String

Required: No

See Also

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

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

WorkspacesPoolSession

Describes a pool session.

Contents

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

SessionId

The identifier of the session.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

UserId

The identifier of the user.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: Yes

AuthenticationType

The authentication method. The user is authenticated using a WorkSpaces Pools URL (API) or SAML 2.0 federation (SAML).

Type: String

Valid Values: `SAML`

Required: No

ConnectionState

Specifies whether a user is connected to the pool session.

Type: String

Valid Values: `CONNECTED | NOT_CONNECTED`

Required: No

ExpirationTime

The time that the pool session ended.

Type: Timestamp

Required: No

InstanceId

The identifier for the instance hosting the session.

Type: String

Pattern: `^i-[a-f0-9]{8}(?:[a-f0-9]{9})?$`

Required: No

NetworkAccessConfiguration

Describes the network details of the pool.

Type: NetworkAccessConfiguration object

Required: No

StartTime

The time that the pool sission started.

Type: Timestamp

Required: No

See Also

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

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

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

InvalidAction

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

InvalidClientTokenId

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

WorkSpaces Core API actions

You can use the following APIs to perform various actions for WorkSpaces Core. We have provided some recommendations next to these actions to help you create your workflow.

> **Note**
>
> These APIs for for WorkSpaces Core only. APIs for using Amazon WorkSpaces Instances are available in the *WorkSpaces Instances API Reference*.

- Deployment and setup
  - CreateTags - Possible
  - CreateWorkspaceBundle - Required
  - CreateWorkspaces - Required
  - DescribeAccount - Required
  - DescribeAccountModifications - Possible
  - ImportWorkspaceImage - Possible, but we highly recommend partners have an interface to import images into Amazon WorkSpaces using this API.
  - ModifyAccount - Possible
  - ListAvailableManagementCidrRanges - Possible, but we highly recommend partners have an interface to onboard customers into Amazon WorkSpaces BYOL using this API.
  - RegisterWorkspaceDirectory - Required
    - EnableInternetAccess - Optional
    - EnableWorkDocs - Optional
    - Tags - Optional
- Operations
  - CopyWorkspaceImage - Possible, but we highly recommend this action. It supports an `UpdateWorkspaceBundle` image process and copying from one region to another.
  - CreateWorkspaceImage - Required
  - DescribeTags - Possible, but we highly recommend partners have an interface to use and modify tags on Amazon WorkSpaces desktops using this API.
  - DescribeWorkspaceBundles - Required

- DescribeWorkspaceDirectories - Required
- DescribeWorkspaceImagePermissions - Required
- DescribeWorkspaceImages - Required for creation of new desktops and within a workflow to use the `UpdateWorkspaceBundle` API that updates an image within a bundle.
- DescribeWorkspaces - Required
- DescribeWorkspaceSnapshots - Possible, but we highly recommend partners have an interface to view snapshots into Amazon WorkSpaces desktops using this API.
- MigrateWorkspace - Possible, but we highly recommend partners have an interface to migrate an Amazon WorkSpaces desktop from one bundle to another using this API.
- ModifyWorkspaceCreationProperties - Possible, but we highly recommend partners have an interface to modify the following properties:
  - Custom Security Group
  - Default OU
  - EnableInternetAccess
  - EnableMaintenanceMode
  - EnableWorkDocs
  - UserEnabledAsLocalAdministrator
- ModifyWorkspaceProperties - Possible, but we highly recommend partners have an interface to modify the following properties:
  - ComputeTypeName
  - RootVolumeSizeGib
  - RunningMode (can change to Manual)
  - RunningModeAutoStopTimeoutInMinutes
  - UserVolumeSizeGib
- ModifyWorkspaceState - Required
- RebootWorkspaces - Required
- RebuildWorkspaces - Required
- RestoreWorkspace - Required
- StartWorkspaces - Required
- StopWorkspaces - Required

- UpdateWorkspaceBundle - Required

  - UpdateWorkspaceImagePermission - Possible, but we highly recommend partners have an interface to modify these properties.
- Termination
  - DeleteTags - Possible
  - DeleteWorkspaceBundle - Required
  - DeleteWorkspaceImage - Required
  - DeregisterWorkspaceDirectory - Required
  - TerminateWorkspaces - Required

Logging WorkSpaces API Calls by Using CloudTrail

The WorkSpaces API is integrated with AWS CloudTrail, a service that provides a record of actions taken by a user, role, or an AWS service in WorkSpaces. CloudTrail captures API calls for WorkSpaces as events. The calls captured include calls from the WorkSpaces console and code calls to the WorkSpaces API operations. If you create a trail, you can enable continuous delivery of CloudTrail events to an Amazon S3 bucket, including events for WorkSpaces. 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 WorkSpaces, 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, including how to configure and enable it, see the AWS CloudTrail User Guide.

WorkSpaces Information in CloudTrail

CloudTrail is enabled on your AWS account when you create the account. When supported event activity occurs in WorkSpaces, that activity is recorded in a CloudTrail event along with other AWS service events in **Event history**. For example, calls to create, rebuild, or terminate WorkSpaces generate entries in CloudTrail log files. For more information, see Actions.

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 WorkSpaces, 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 AWS 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 the following:

- 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

Example: WorkSpaces Log File Entry

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 aren't an ordered stack trace of the public API calls, so they don't appear in any specific order.

Any sensitive information, such as passwords, authentication tokens, file comments, and file contents are redacted in the log entries.

The following shows an example of a CloudTrail log entry for WorkSpaces.

```
{
  "Records" : [
    {
      "eventVersion" : "1.02",
      "userIdentity" :
      {
        "type" : "IAMUser",
        "principalId" : "user_id",
        "arn" : "user_arn",
        "accountId" : "account_id",
        "accessKeyId" : "access_key_id",
        "userName" : "username"
      },
      "eventTime" : "event_time",
      "eventSource" : "workspaces.amazonaws.com",
      "eventName" : "DescribeWorkspaces",
      "awsRegion" : "region",
      "sourceIPAddress" : "IP_address",
      "userAgent" : "user_agent",
      "requestParameters" :
      {
        "requestContext" :
        {
          "awsAccountId" : "account_id"
        }
      },
      "responseElements" : "null",
      "requestID" : "request_id",
      "eventID" : "event_id",
```

```
      "eventType" : "AwsApiCall",
      "recipientAccountId" : "account_id"
    }
  ]
}
```