AWS Organizations

API Reference

AWS Organizations: API Reference

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Welcome to the AWS Organizations API Reference

AWS Organizations is a web service that enables you to consolidate your multiple AWS accounts into an *organization* and centrally manage your accounts and their resources.

This guide provides descriptions of the Organizations API. For more information about using this service, see the AWS Organizations User Guide.

API Version

This version of the Organizations API Reference documents the Organizations API version 2016-11-28.

> **Note**
> As an alternative to using the API directly, you can use one of the AWS SDKs, which consist of libraries and sample code for various programming languages and platforms (Java, Ruby, .NET, iOS, Android, and more). The SDKs provide a convenient way to create programmatic access to AWS Organizations. For example, the SDKs take care of cryptographically signing requests, managing errors, and retrying requests automatically. For more information about the AWS SDKs, including how to download and install them, see Tools for Amazon Web Services.

We recommend that you use the AWS SDKs to make programmatic API calls to Organizations. However, you also can use the Organizations Query API to make direct calls to the Organizations web service. To learn more about the Organizations Query API, see Making Query Requests in the *AWS Organizations User Guide*. Organizations supports GET and POST requests for all actions. That is, the API does not require you to use GET for some actions and POST for others. However, GET requests are subject to the limitation size of a URL. Therefore, for operations that require larger sizes, use a POST request.

Signing Requests

When you send HTTP requests to AWS, you must sign the requests so that AWS can identify who sent them. You sign requests with your AWS access key, which consists of an access key ID and a secret access key. We strongly recommend that you do not create an access key for your root account. Anyone who has the access key for your root account has unrestricted access to all the resources in your account. Instead, create an access key for an IAM user account that has administrative privileges. As another option, use AWS Security Token Service to generate temporary security credentials, and use those credentials to sign requests.

To sign requests, we recommend that you use Signature Version 4. If you have an existing application that uses Signature Version 2, you do not have to update it to use Signature Version 4. However, some operations now require Signature Version 4. The documentation for operations that require version 4 indicate this requirement.

When you use the AWS Command Line Interface (AWS CLI) or one of the AWS SDKs to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when you configure the tools.

In this release, each organization can have only one root. In a future release, a single organization will support multiple roots.

Support and Feedback for AWS Organizations

We welcome your feedback. Send your comments to feedback-awsorganizations@amazon.com or post your feedback and questions in the AWS Organizations support forum. For more information about the AWS support forums, see Forums Help.

Endpoint to Call When Using the CLI or the AWS API

For the current release of Organizations, you must specify the `us-east-1` region for all AWS API and CLI calls. You can do this in the CLI by using these parameters and commands:

- Use the following parameter with each command to specify both the endpoint and its region:

  `--endpoint-url https://organizations.us-east-1.amazonaws.com`
- Use the default endpoint, but configure your default region with this command:

  `aws configure set default.region us-east-1`
- Use the following parameter with each command to specify the endpoint:

  `--region us-east-1`

For the various SDKs used to call the APIs, see the documentation for the SDK of interest to learn how to direct the requests to a specific endpoint. For more information, see Regions and Endpoints in the *AWS General Reference*.

How examples are presented

The JSON returned by the AWS Organizations service as response to your requests is returned as a single long string without line breaks or formatting whitespace. Both line breaks and whitespace are included in the examples in this guide to improve readability. When example input parameters also would result in long strings that would extend beyond the screen, we insert line breaks to enhance readability. You should always submit the input as a single JSON text string.

Recording API Requests

AWS Organizations supports AWS CloudTrail, a service that records AWS API calls for your AWS account and delivers log files to an Amazon S3 bucket. By using information collected by AWS CloudTrail, you can determine which requests were successfully made to Organizations, who made the request, when it was made, and so on. For more about AWS Organizations and its support for AWS CloudTrail, see Logging AWS Organizations Events with AWS CloudTrail in the *AWS Organizations User Guide*. To learn more about CloudTrail, including how to turn it on and find your log files, see the AWS CloudTrail User Guide.

Actions

The following actions are supported:

- AcceptHandshake (p. 5)
- AttachPolicy (p. 11)
- CancelHandshake (p. 17)
- CreateAccount (p. 22)
- CreateGovCloudAccount (p. 29)
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- ListCreateAccountStatus (p. 159)
- ListHandshakesForAccount (p. 164)
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- ListOrganizationalUnitsForParent (p. 175)
- ListParents (p. 180)
- ListPolicies (p. 185)
- ListPoliciesForTarget (p. 190)
- ListRoots (p. 195)
- ListTagsForResource (p. 200)
- ListTargetsForPolicy (p. 204)

AcceptHandshake

Sends a response to the originator of a handshake agreeing to the action proposed by the handshake request.

This operation can be called only by the following principals when they also have the relevant IAM permissions:

- **Invitation to join** or **Approve all features request** handshakes: only a principal from the member account.

  The user who calls the API for an invitation to join must have the `organizations:AcceptHandshake` permission. If you enabled all features in the organization, the user must also have the `iam:CreateServiceLinkedRole` permission so that AWS Organizations can create the required service-linked role named `AWSServiceRoleForOrganizations`. For more information, see AWS Organizations and Service-Linked Roles in the *AWS Organizations User Guide*.

- **Enable all features final confirmation** handshake: only a principal from the master account.

  For more information about invitations, see Inviting an AWS Account to Join Your Organization in the *AWS Organizations User Guide.* For more information about requests to enable all features in the organization, see Enabling All Features in Your Organization in the *AWS Organizations User Guide.*

After you accept a handshake, it continues to appear in the results of relevant APIs for only 30 days. After that, it's deleted.

Request Syntax

```
{
    "HandshakeId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

HandshakeId (p. 5)

The unique identifier (ID) of the handshake that you want to accept.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: Yes

Response Syntax

```
{
```

```
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
                "Resources": [
                    "HandshakeResource"
                ],
                "Type": "string",
                "Value": "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.

Handshake (p. 5)

A structure that contains details about the accepted handshake.

Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccessDeniedForDependencyException

The operation that you attempted requires you to have the `iam:CreateServiceLinkedRole` for `organizations.amazonaws.com` permission so that AWS Organizations can create the required service-linked role. You don't have that permission.

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

HandshakeAlreadyInStateException

The specified handshake is already in the requested state. For example, you can't accept a handshake that was already accepted.

HTTP Status Code: 400

HandshakeConstraintViolationException

The requested operation would violate the constraint identified in the reason code.

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. Note that deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get this exception immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- ALREADY_IN_AN_ORGANIZATION: The handshake request is invalid because the invited account is already a member of an organization.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- INVITE_DISABLED_DURING_ENABLE_ALL_FEATURES: You can't issue new invitations to join an organization while it's in the process of enabling all features. You can resume inviting accounts after you finalize the process when all accounts have agreed to the change.

- ORGANIZATION_ALREADY_HAS_ALL_FEATURES: The handshake request is invalid because the organization has already enabled all features.

- ORGANIZATION_FROM_DIFFERENT_SELLER_OF_RECORD: The request failed because the account is from a different marketplace than the accounts in the organization. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be from the same marketplace.

- ORGANIZATION_MEMBERSHIP_CHANGE_RATE_LIMIT_EXCEEDED: You attempted to change the membership of an account too quickly after its previous change.

- PAYMENT_INSTRUMENT_REQUIRED: You can't complete the operation with an account that doesn't have a payment instrument, such as a credit card, associated with it.

HTTP Status Code: 400

HandshakeNotFoundException

We can't find a handshake with the `HandshakeId` that you specified.

HTTP Status Code: 400

InvalidHandshakeTransitionException

You can't perform the operation on the handshake in its current state. For example, you can't cancel a handshake that was already accepted or accept a handshake that was already declined.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

Diego, the owner of an organization, has previously invited Juan's account to join his organization. The
following example shows Juan's account accepting the handshake and thus agreeing to the invitation.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 120
X-Amz-Target: AWSOrganizationsV20161128.AcceptHandshake
X-Amz-Date: 20161130T192210Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{"HandshakeId": "h-examplehandshakeid111"}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 613
Date: Mon, 30 Nov 2016 19:22:16 GMT

{
  "Handshake": {
    "Action": "INVITE",
    "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
    "RequestedTimestamp": 1481656459.257,
    "ExpirationTimestamp": 1482952459.257,
    "Id": "h-examplehandshakeid111",
    "Parties": [
      {
        "Id": "o-exampleorgid",
        "Type": "ORGANIZATION"
      },
      {
        "Id": "juan@example.com",
        "Type": "EMAIL"
      }
    ],
    "Resources": [
      {
        "Resources": [
          {
            "Type": "MASTER_EMAIL",
            "Value": "diego@example.com"
          },
          {
            "Type": "MASTER_NAME",
            "Value": "Org Master Account"
          },
          {
            "Type": "ORGANIZATION_FEATURE_SET",
```

```
              "Value": "ALL"
            }
          ],
          "Type": "ORGANIZATION",
          "Value": "o-exampleorgid"
        },
        {
          "Type": "EMAIL",
          "Value": "juan@example.com"
        }
      ],
      "State": "ACCEPTED"
    }
}
```

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

AttachPolicy

Attaches a policy to a root, an organizational unit (OU), or an individual account. How the policy affects accounts depends on the type of policy:

- **Service control policy (SCP)** - An SCP specifies what permissions can be delegated to users in affected member accounts. The scope of influence for a policy depends on what you attach the policy to:
  - If you attach an SCP to a root, it affects all accounts in the organization.
  - If you attach an SCP to an OU, it affects all accounts in that OU and in any child OUs.
  - If you attach the policy directly to an account, it affects only that account.

  SCPs are JSON policies that specify the maximum permissions for an organization or organizational unit (OU). You can attach one SCP to a higher level root or OU, and a different SCP to a child OU or to an account. The child policy can further restrict only the permissions that pass through the parent filter and are available to the child. An SCP that is attached to a child can't grant a permission that the parent hasn't already granted. For example, imagine that the parent SCP allows permissions A, B, C, D, and E. The child SCP allows C, D, E, F, and G. The result is that the accounts affected by the child SCP are allowed to use only C, D, and E. They can't use A or B because the child OU filtered them out. They also can't use F and G because the parent OU filtered them out. They can't be granted back by the child SCP; child SCPs can only filter the permissions they receive from the parent SCP.

  AWS Organizations attaches a default SCP named `"FullAWSAccess` to every root, OU, and account. This default SCP allows all services and actions, enabling any new child OU or account to inherit the permissions of the parent root or OU. If you detach the default policy, you must replace it with a policy that specifies the permissions that you want to allow in that OU or account.

  For more information about how AWS Organizations policies permissions work, see Using Service Control Policies in the *AWS Organizations User Guide.*

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "PolicyId": "string",
    "TargetId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyId (p. 11)

The unique identifier (ID) of the policy that you want to attach to the target. You can get the ID for the policy by calling the ListPolicies (p. 185) operation.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: Yes

TargetId (p. 11)

The unique identifier (ID) of the root, OU, or account that you want to attach the policy to. You can get the ID by calling the ListRoots (p. 195), ListOrganizationalUnitsForParent (p. 175), or ListAccounts (p. 139) operations.

The regex pattern for a target ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Account** - A string that consists of exactly 12 digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.
- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.
- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.
- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

DuplicatePolicyAttachmentException

The selected policy is already attached to the specified target.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

PolicyTypeNotEnabledException

The specified policy type isn't currently enabled in this root. You can't attach policies of the specified type to entities in a root until you enable that type in the root. For more information, see Enabling All Features in Your Organization in the *AWS Organizations User Guide.*

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Examples

Example 1

The following example shows how to attach a service control policy (SCP) to an OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 275
X-Amz-Target: AWSOrganizationsV20161128.AttachPolicy
X-Amz-Date: 20160808T211405Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG
```

```
{ "TargetId": "ou-examplerootid111-exampleouid111", "PolicyId": "p-examplepolicyid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Mon, 08 Aug 2016 21:14:06 GMT
```

Example 2

The following example shows how to attach a service control policy directly to an account.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 275
X-Amz-Target: AWSOrganizationsV20161128.AttachPolicy
X-Amz-Date: 20160808T211405Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "TargetId": "333333333333", "PolicyId": "p-examplepolicyid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Mon, 08 Aug 2016 21:14:06 GMT
```

See Also

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

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

CancelHandshake

Cancels a handshake. Canceling a handshake sets the handshake state to `CANCELED`.

This operation can be called only from the account that originated the handshake. The recipient of the handshake can't cancel it, but can use DeclineHandshake (p. 56) instead. After a handshake is canceled, the recipient can no longer respond to that handshake.

After you cancel a handshake, it continues to appear in the results of relevant APIs for only 30 days. After that, it's deleted.

Request Syntax

```
{
    "HandshakeId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

HandshakeId (p. 17)

The unique identifier (ID) of the handshake that you want to cancel. You can get the ID from the ListHandshakesForOrganization (p. 169) operation.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: Yes

Response Syntax

```
{
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
```

```
            "Resources": [
                "HandshakeResource"
            ],
            "Type": "string",
            "Value": "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.

Handshake (p. 17)

A structure that contains details about the handshake that you canceled.

Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

HandshakeAlreadyInStateException

The specified handshake is already in the requested state. For example, you can't accept a handshake that was already accepted.

HTTP Status Code: 400

HandshakeNotFoundException

We can't find a handshake with the `HandshakeId` that you specified.

HTTP Status Code: 400

InvalidHandshakeTransitionException

You can't perform the operation on the handshake in its current state. For example, you can't cancel a handshake that was already accepted or accept a handshake that was already declined.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

Diego, the admin of an organization, previously sent an invitation to Anaya's account to join the organization. Diego later changes his mind and decides to cancel the invitation before Anaya accepts it. The following example shows Diego canceling the handshake (and the invitation it represents). The output includes a handshake object that shows that the state is now CANCELED.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 120
X-Amz-Target: AWSOrganizationsV20161128.CancelHandshake
X-Amz-Date: 20161130T213700Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "HandshakeId": "h-examplehandshakeid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 665
Date: Mon, 30 Nov 2016 21:37:00 GMT

{
  "Handshake": {
    "Id": "h-examplehandshakeid111",
    "State":"CANCELED",
    "Action": "INVITE",
    "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
    "Parties": [
      {
        "Id": "o-exampleorgid",
        "Type": "ORGANIZATION"
      },
      {
        "Id": "anaya@example.com",
        "Type": "EMAIL"
      }
    ],
    "Resources": [
      {
        "Type": "ORGANIZATION",
        "Value": "o-exampleorgid",
        "Resources": [
          {
            "Type": "MASTER_EMAIL",
            "Value": "diego@example.com"
          },
          {
            "Type": "MASTER_NAME",
            "Value": "Master Account"
```

```
            },
            {
              "Type": "ORGANIZATION_FEATURE_SET",
              "Value": "CONSOLIDATED_BILLING"
            }
          ]
        },
        {
          "Type": "EMAIL",
          "Value": "anika@example.com"
        },
        {
          "Type": "NOTES",
          "Value": "This is a request for Anaya's account to join Diego's organization."
        }
      ],
      "RequestedTimestamp": 1.47008383521E9,
      "ExpirationTimestamp": 1.47137983521E9
    }
}
```

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

CreateAccount

Creates an AWS account that is automatically a member of the organization whose credentials made the request. This is an asynchronous request that AWS performs in the background. Because `CreateAccount` operates asynchronously, it can return a successful completion message even though account initialization might still be in progress. You might need to wait a few minutes before you can successfully access the account. To check the status of the request, do one of the following:

- Use the `OperationId` response element from this operation to provide as a parameter to the DescribeCreateAccountStatus (p. 76) operation.
- Check the AWS CloudTrail log for the `CreateAccountResult` event. For information on using AWS CloudTrail with AWS Organizations, see Monitoring the Activity in Your Organization in the *AWS Organizations User Guide.*

The user who calls the API to create an account must have the `organizations:CreateAccount` permission. If you enabled all features in the organization, AWS Organizations creates the required service-linked role named `AWSServiceRoleForOrganizations`. For more information, see AWS Organizations and Service-Linked Roles in the *AWS Organizations User Guide*.

AWS Organizations preconfigures the new member account with a role (named `OrganizationAccountAccessRole` by default) that grants users in the master account administrator permissions in the new member account. Principals in the master account can assume the role. AWS Organizations clones the company name and address information for the new account from the organization's master account.

This operation can be called only from the organization's master account.

For more information about creating accounts, see Creating an AWS Account in Your Organization in the *AWS Organizations User Guide.*

Important

- When you create an account in an organization using the AWS Organizations console, API, or CLI commands, the information required for the account to operate as a standalone account, such as a payment method and signing the end user license agreement (EULA) is *not* automatically collected. If you must remove an account from your organization later, you can do so only after you provide the missing information. Follow the steps at To leave an organization as a member account in the *AWS Organizations User Guide*.
- If you get an exception that indicates that you exceeded your account limits for the organization, contact AWS Support.
- If you get an exception that indicates that the operation failed because your organization is still initializing, wait one hour and then try again. If the error persists, contact AWS Support.
- Using `CreateAccount` to create multiple temporary accounts isn't recommended. You can only close an account from the Billing and Cost Management Console, and you must be signed in as the root user. For information on the requirements and process for closing an account, see Closing an AWS Account in the *AWS Organizations User Guide.*

Note
When you create a member account with this operation, you can choose whether to create the account with the **IAM User and Role Access to Billing Information** switch enabled. If you enable it, IAM users and roles that have appropriate permissions can view billing information for the account. If you disable it, only the account root user can access billing information. For information about how to disable this switch for an account, see Granting Access to Your Billing Information and Tools.

Request Syntax

```
{
   "AccountName": "string",
   "Email": "string",
   "IamUserAccessToBilling": "string",
   "RoleName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

AccountName (p. 23)

> The friendly name of the member account.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 50.
>
> Pattern: `[\u0020-\u007E]+`
>
> Required: Yes

Email (p. 23)

> The email address of the owner to assign to the new member account. This email address must not already be associated with another AWS account. You must use a valid email address to complete account creation. You can't access the root user of the account or remove an account that was created with an invalid email address.
>
> Type: String
>
> Length Constraints: Minimum length of 6. Maximum length of 64.
>
> Pattern: `[^\s@]+@[^\s@]+\.[^\s@]+`
>
> Required: Yes

IamUserAccessToBilling (p. 23)

> If set to `ALLOW`, the new account enables IAM users to access account billing information *if* they have the required permissions. If set to `DENY`, only the root user of the new account can access account billing information. For more information, see Activating Access to the Billing and Cost Management Console in the *AWS Billing and Cost Management User Guide*.
>
> If you don't specify this parameter, the value defaults to `ALLOW`, and IAM users and roles with the required permissions can access billing information for the new account.
>
> Type: String
>
> Valid Values: `ALLOW | DENY`
>
> Required: No

RoleName (p. 23)

> (Optional)

The name of an IAM role that AWS Organizations automatically preconfigures in the new member account. This role trusts the master account, allowing users in the master account to assume the role, as permitted by the master account administrator. The role has administrator permissions in the new member account.

If you don't specify this parameter, the role name defaults to `OrganizationAccountAccessRole`.

For more information about how to use this role to access the member account, see Accessing and Administering the Member Accounts in Your Organization in the *AWS Organizations User Guide*, and steps 2 and 3 in Tutorial: Delegate Access Across AWS Accounts Using IAM Roles in the *IAM User Guide.*

The regex pattern that is used to validate this parameter is a string of characters that can consist of uppercase letters, lowercase letters, digits with no spaces, and any of the following characters: =,.@-

Type: String

Pattern: `[\w+=,.@-]{1,64}`

Required: No

Response Syntax

```
{
    "CreateAccountStatus": {
        "AccountId": "string",
        "AccountName": "string",
        "CompletedTimestamp": number,
        "FailureReason": "string",
        "GovCloudAccountId": "string",
        "Id": "string",
        "RequestedTimestamp": 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.

CreateAccountStatus (p. 24)

A structure that contains details about the request to create an account. This response structure might not be fully populated when you first receive it because account creation is an asynchronous process. You can pass the returned `CreateAccountStatus` ID as a parameter to DescribeCreateAccountStatus (p. 76) to get status about the progress of the request at later times. You can also check the AWS CloudTrail log for the `CreateAccountResult` event. For more information, see Monitoring the Activity in Your Organization in the *AWS Organizations User Guide*.

Type: CreateAccountStatus (p. 245) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that

corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

FinalizingOrganizationException

AWS Organizations couldn't perform the operation because your organization hasn't finished initializing. This can take up to an hour. Try again later. If after one hour you continue to receive this error, contact AWS Support.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.

- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to create a member account in an organization. The member account is configured with the name `Production Account` and the email address of `anaya@example.com`. AWS Organizations automatically creates an IAM role using the default name of `OrganizationAccountAccessRole` because the `roleName` parameter isn't specified. Also, the setting that allows IAM users or roles with sufficient permissions to access account billing data is set to

the default value of `ALLOW` because the `IamUserAccessToBilling` parameter isn't specified. AWS Organizations automatically sends Anaya a "Welcome to AWS" email.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 78
X-Amz-Target: AWSOrganizationsV20161128.CreateAccount
X-Amz-Date: 20161130T223933Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Email": "anaya@example.com", "AccountName": "Production Account" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 300
Date: Thu, 30 Nov 2016 22:39:35 GMT

{
  "CreateAccountStatus": {
    "State": "IN_PROGRESS",
    "Id": "car-examplecreateaccountrequestid111"
  }
}
```

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

CreateGovCloudAccount

This action is available if all of the following are true:

- You're authorized to create accounts in the AWS GovCloud (US) Region. For more information on the AWS GovCloud (US) Region, see the *AWS GovCloud User Guide.*
- You already have an account in the AWS GovCloud (US) Region that is associated with your master account in the commercial Region.
- You call this action from the master account of your organization in the commercial Region.
- You have the `organizations:CreateGovCloudAccount` permission. AWS Organizations creates the required service-linked role named `AWSServiceRoleForOrganizations`. For more information, see AWS Organizations and Service-Linked Roles in the *AWS Organizations User Guide.*

AWS automatically enables AWS CloudTrail for AWS GovCloud (US) accounts, but you should also do the following:

- Verify that AWS CloudTrail is enabled to store logs.
- Create an S3 bucket for AWS CloudTrail log storage.

  For more information, see Verifying AWS CloudTrail Is Enabled in the *AWS GovCloud User Guide*.

You call this action from the master account of your organization in the commercial Region to create a standalone AWS account in the AWS GovCloud (US) Region. After the account is created, the master account of an organization in the AWS GovCloud (US) Region can invite it to that organization. For more information on inviting standalone accounts in the AWS GovCloud (US) to join an organization, see AWS Organizations in the *AWS GovCloud User Guide.*

Calling `CreateGovCloudAccount` is an asynchronous request that AWS performs in the background. Because `CreateGovCloudAccount` operates asynchronously, it can return a successful completion message even though account initialization might still be in progress. You might need to wait a few minutes before you can successfully access the account. To check the status of the request, do one of the following:

- Use the `OperationId` response element from this operation to provide as a parameter to the DescribeCreateAccountStatus (p. 76) operation.
- Check the AWS CloudTrail log for the `CreateAccountResult` event. For information on using AWS CloudTrail with Organizations, see Monitoring the Activity in Your Organization in the *AWS Organizations User Guide.*

When you call the `CreateGovCloudAccount` action, you create two accounts: a standalone account in the AWS GovCloud (US) Region and an associated account in the commercial Region for billing and support purposes. The account in the commercial Region is automatically a member of the organization whose credentials made the request. Both accounts are associated with the same email address.

A role is created in the new account in the commercial Region that allows the master account in the organization in the commercial Region to assume it. An AWS GovCloud (US) account is then created and associated with the commercial account that you just created. A role is created in the new AWS GovCloud (US) account that can be assumed by the AWS GovCloud (US) account that is associated with the master account of the commercial organization. For more information and to view a diagram that explains how account access works, see AWS Organizations in the *AWS GovCloud User Guide.*

For more information about creating accounts, see Creating an AWS Account in Your Organization in the *AWS Organizations User Guide.*

Important

- When you create an account in an organization using the AWS Organizations console, API, or CLI commands, the information required for the account to operate as a standalone account, such as a payment method and signing the end user license agreement (EULA) is *not* automatically collected. If you must remove an account from your organization later, you can do so only after you provide the missing information. Follow the steps at To leave an organization as a member account in the *AWS Organizations User Guide.*

- If you get an exception that indicates that you exceeded your account limits for the organization, contact AWS Support.

- If you get an exception that indicates that the operation failed because your organization is still initializing, wait one hour and then try again. If the error persists, contact AWS Support.

- Using `CreateGovCloudAccount` to create multiple temporary accounts isn't recommended. You can only close an account from the AWS Billing and Cost Management console, and you must be signed in as the root user. For information on the requirements and process for closing an account, see Closing an AWS Account in the *AWS Organizations User Guide*.

Note
When you create a member account with this operation, you can choose whether to create the account with the **IAM User and Role Access to Billing Information** switch enabled. If you enable it, IAM users and roles that have appropriate permissions can view billing information for the account. If you disable it, only the account root user can access billing information. For information about how to disable this switch for an account, see Granting Access to Your Billing Information and Tools.

Request Syntax

```
{
    "AccountName": "string",
    "Email": "string",
    "IamUserAccessToBilling": "string",
    "RoleName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

AccountName (p. 30)

The friendly name of the member account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `[\u0020-\u007E]+`

Required: Yes

Email (p. 30)

The email address of the owner to assign to the new member account in the commercial Region. This email address must not already be associated with another AWS account. You must use a

valid email address to complete account creation. You can't access the root user of the account or remove an account that was created with an invalid email address. Like all request parameters for `CreateGovCloudAccount`, the request for the email address for the AWS GovCloud (US) account originates from the commercial Region, not from the AWS GovCloud (US) Region.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `[^\s@]+@[^\s@]+\.[^\s@]+`

Required: Yes

IamUserAccessToBilling (p. 30)

If set to `ALLOW`, the new linked account in the commercial Region enables IAM users to access account billing information *if* they have the required permissions. If set to `DENY`, only the root user of the new account can access account billing information. For more information, see Activating Access to the Billing and Cost Management Console in the *AWS Billing and Cost Management User Guide.*

If you don't specify this parameter, the value defaults to `ALLOW`, and IAM users and roles with the required permissions can access billing information for the new account.

Type: String

Valid Values: `ALLOW | DENY`

Required: No

RoleName (p. 30)

(Optional)

The name of an IAM role that AWS Organizations automatically preconfigures in the new member accounts in both the AWS GovCloud (US) Region and in the commercial Region. This role trusts the master account, allowing users in the master account to assume the role, as permitted by the master account administrator. The role has administrator permissions in the new member account.

If you don't specify this parameter, the role name defaults to `OrganizationAccountAccessRole`.

For more information about how to use this role to access the member account, see Accessing and Administering the Member Accounts in Your Organization in the *AWS Organizations User Guide* and steps 2 and 3 in Tutorial: Delegate Access Across AWS Accounts Using IAM Roles in the *IAM User Guide.*

The regex pattern that is used to validate this parameter is a string of characters that can consist of uppercase letters, lowercase letters, digits with no spaces, and any of the following characters: =,.@-

Type: String

Pattern: `[\w+=,.@-]{1,64}`

Required: No

Response Syntax

```
{
   "CreateAccountStatus": {
      "AccountId": "string",
      "AccountName": "string",
```

```
        "CompletedTimestamp": number,
        "FailureReason": "string",
        "GovCloudAccountId": "string",
        "Id": "string",
        "RequestedTimestamp": 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.

CreateAccountStatus (p. 31)

Contains the status about a CreateAccount (p. 22) or CreateGovCloudAccount (p. 29) request to create an AWS account or an AWS GovCloud (US) account in an organization.

Type: CreateAccountStatus (p. 245) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  Note
  Deleted and closed accounts still count toward your limit.

  Important
  If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.

- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

FinalizingOrganizationException

AWS Organizations couldn't perform the operation because your organization hasn't finished initializing. This can take up to an hour. Try again later. If after one hour you continue to receive this error, contact AWS Support.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to create a member account in the AWS GovCloud (US) Region in an organization. The commercial account is configured with the name `Production Account` and the email address of `anaya@example.com`. AWS Organizations automatically creates an IAM role using the default name of `OrganizationAccountAccessRole` because the `roleName` parameter isn't specified. Also, the setting that allows IAM users or roles with sufficient permissions to access account billing data in the account in the commercial Region is set to the default value of `ALLOW` because the `IamUserAccessToBilling` parameter isn't specified. AWS Organizations automatically sends Anaya a "Welcome to AWS" email.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 78
X-Amz-Target: AWSOrganizationsV20161128.CreateGovCloudAccount
X-Amz-Date: 20161130T223933Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Email": "anaya@example.com", "AccountName": "Production Account" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 300
Date: Thu, 30 Nov 2016 22:39:35 GMT

{
  "CreateAccountStatus": {
    "State": "IN_PROGRESS",
    "Id": "car-examplecreateaccountrequestid111"
  }
```

```
}
```

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

CreateOrganization

Creates an AWS organization. The account whose user is calling the `CreateOrganization` operation automatically becomes the master account of the new organization.

This operation must be called using credentials from the account that is to become the new organization's master account. The principal must also have the relevant IAM permissions.

By default (or if you set the `FeatureSet` parameter to `ALL`), the new organization is created with all features enabled and service control policies automatically enabled in the root. If you instead choose to create the organization supporting only the consolidated billing features by setting the `FeatureSet` parameter to `CONSOLIDATED_BILLING`", no policy types are enabled by default, and you can't use organization policies.

Request Syntax

```
{
    "FeatureSet": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

FeatureSet (p. 37)

Specifies the feature set supported by the new organization. Each feature set supports different levels of functionality.

- `CONSOLIDATED_BILLING`: All member accounts have their bills consolidated to and paid by the master account. For more information, see Consolidated billing in the *AWS Organizations User Guide.*

  The consolidated billing feature subset isn't available for organizations in the AWS GovCloud (US) Region.

- `ALL`: In addition to all the features supported by the consolidated billing feature set, the master account can also apply any policy type to any member account in the organization. For more information, see All features in the *AWS Organizations User Guide.*

Type: String

Valid Values: `ALL | CONSOLIDATED_BILLING`

Required: No

Response Syntax

```
{
    "Organization": {
        "Arn": "string",
        "AvailablePolicyTypes": [
            {
                "Status": "string",
```

```
            "Type": "string"
        }
    ],
    "FeatureSet": "string",
    "Id": "string",
    "MasterAccountArn": "string",
    "MasterAccountEmail": "string",
    "MasterAccountId": "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.

Organization (p. 37)

> A structure that contains details about the newly created organization.

> Type: Organization (p. 254) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

> You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

> HTTP Status Code: 400

AccessDeniedForDependencyException

> The operation that you attempted requires you to have the `iam:CreateServiceLinkedRole` for `organizations.amazonaws.com` permission so that AWS Organizations can create the required service-linked role. You don't have that permission.

> HTTP Status Code: 400

AlreadyInOrganizationException

> This account is already a member of an organization. An account can belong to only one organization at a time.

> HTTP Status Code: 400

ConcurrentModificationException

> The target of the operation is currently being modified by a different request. Try again later.

> HTTP Status Code: 400

ConstraintViolationException

> Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Examples

Example

Diego wants to create an organization using credentials from account 111111111111. The following example shows that the account becomes the master account in the new organization. Because he doesn't specify a features set, the new organization defaults to all features enabled and service control policies are enabled on the root.

The output includes an organization structure that contains details about the new organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 131
X-Amz-Target: AWSOrganizationsV20161128.CreateOrganization
X-Amz-Date: 20160804T215628Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160804/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 249
Date: Thu, 04 Aug 2016 21:56:31 GMT

{
  "Organization": {
    "AvailablePolicyTypes": [
      {
        "Status": "ENABLED",
        "Type": "SERVICE_CONTROL_POLICY"
      }
    ],
    "MasterAccountId": "111111111111",
    "MasterAccountArn": "arn:aws:organizations::111111111111:account/o-
exampleorgid/111111111111",
    "MasterAccountEmail": "diego@example.com",
    "FeatureSet": "ALL",
```

```
    "Id": "o-exampleorgid",
    "Arn": "arn:aws:organizations::111111111111:organization/o-exampleorgid"
  }
}
```

Example

The following example creates an organization that supports only the consolidated billing features.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 19
X-Amz-Target: AWSOrganizationsV20161128.CreateOrganization
X-Amz-Date: 20161215T193014Z
User-Agent: aws-cli/1.11.13 Python/2.7.8 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.4.70
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161215/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "FeatureSet": "CONSOLIDATED_BILLING" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 318
Date: Thu, 15 Dec 2016 19:30:17 GMT

{
  "Organization": {
    "Arn": "arn:aws:organizations::111111111111:organization/o-exampleorgid",
    "AvailablePolicyTypes": [],
    "Id": "o-exampleorgid",
    "MasterAccountArn": "arn:aws:organizations::111111111111:account/o-
exampleorgid/111111111111",
    "MasterAccountEmail": "diego@example.com",
    "MasterAccountId": "111111111111",
    "FeatureSet": "CONSOLIDATED_BILLING"
  }
}
```

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
- AWS SDK for Java
- AWS SDK for JavaScript

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2

CreateOrganizationalUnit

Creates an organizational unit (OU) within a root or parent OU. An OU is a container for accounts that enables you to organize your accounts to apply policies according to your business requirements. The number of levels deep that you can nest OUs is dependent upon the policy types enabled for that root. For service control policies, the limit is five.

For more information about OUs, see Managing Organizational Units in the *AWS Organizations User Guide.*

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Name (p. 44)

The friendly name to assign to the new OU.

Type: String

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

Required: Yes

ParentId (p. 44)

The unique identifier (ID) of the parent root or OU that you want to create the new OU in.

The regex pattern for a parent ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: ^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$

Required: Yes

Response Syntax

```
{
```

```
    "OrganizationalUnit": {
        "Arn": "string",
        "Id": "string",
        "Name": "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.

OrganizationalUnit (p. 44)

A structure that contains details about the newly created OU.

Type: OrganizationalUnit (p. 256) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To

leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.

- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

DuplicateOrganizationalUnitException

An OU with the same name already exists.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ParentNotFoundException

We can't find a root or OU with the `ParentId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

> You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.
>
> For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*
>
> HTTP Status Code: 400

Example

The following example shows how to create an OU that is named `AccountingOU`.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 131
X-Amz-Target: AWSOrganizationsV20161128.CreateOrganizationalUnit
X-Amz-Date: 20160802T170245Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ParentId": "r-examplerootid111", "Name": "AccountingOU" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 180
Date: Tue, 02 Aug 2016 17:02:46 GMT

{
  "OrganizationalUnit": {
    "Id": "ou-examplerootid111-exampleouid111",
    "Arn": "arn:aws:organizations::111111111111:ou/o-exampleorgid/ou-examplerootid111-
exampleouid111",
    "Name": "AccountingOU"
  }
}
```

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

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

CreatePolicy

Creates a policy of a specified type that you can attach to a root, an organizational unit (OU), or an individual AWS account.

For more information about policies and their use, see Managing Organization Policies.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "Content": "string",
    "Description": "string",
    "Name": "string",
    "Type": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Content (p. 50)

The policy content to add to the new policy. For example, if you create a service control policy (SCP), this string must be JSON text that specifies the permissions that admins in attached accounts can delegate to their users, groups, and roles. For more information about the SCP syntax, see Service Control Policy Syntax in the *AWS Organizations User Guide.*

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000000.

Required: Yes

Description (p. 50)

An optional description to assign to the policy.

Type: String

Length Constraints: Maximum length of 512.

Required: Yes

Name (p. 50)

The friendly name to assign to the policy.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: Yes

Type (p. 50)

> The type of policy to create.
>
> > **Note**
> > In the current release, the only type of policy that you can create is a service control policy
> > (SCP).
>
> Type: String
>
> Valid Values: `SERVICE_CONTROL_POLICY`
>
> Required: Yes

Response Syntax

```
{
    "Policy": {
        "Content": "string",
        "PolicySummary": {
            "Arn": "string",
            "AwsManaged": boolean,
            "Description": "string",
            "Id": "string",
            "Name": "string",
            "Type": "string"
        }
    }
}
```

Response Elements

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

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

Policy (p. 51)

> A structure that contains details about the newly created policy.
>
> Type: Policy (p. 259) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

> You don't have permissions to perform the requested operation. The user or role that is making
> the request must have at least one IAM permissions policy attached that grants the required
> permissions. For more information, see Access Management in the *IAM User Guide.*
>
> HTTP Status Code: 400

AWSOrganizationsNotInUseException

> Your account isn't a member of an organization. To make this request, you must use the credentials
> of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with

the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.

- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

DuplicatePolicyException

A policy with the same name already exists.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.

- INPUT_REQUIRED: You must include a value for all required parameters.

- INVALID_ENUM: You specified an invalid value.

- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.

- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.

- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.

- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.

- INVALID_PATTERN: You provided a value that doesn't match the required pattern.

- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.

- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.

- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.

- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.

- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

MalformedPolicyDocumentException

The provided policy document doesn't meet the requirements of the specified policy type. For example, the syntax might be incorrect. For details about service control policy syntax, see Service Control Policy Syntax in the *AWS Organizations User Guide.*

HTTP Status Code: 400

PolicyTypeNotAvailableForOrganizationException

You can't use the specified policy type with the feature set currently enabled for this organization. For example, you can enable SCPs only after you enable all features in the organization. For more information, see Enabling and Disabling a Policy Type on a Root in the *AWS Organizations User Guide.*

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to create a service control policy (SCP) that is named `AllowAllS3Actions`. The JSON string in the `content` parameter specifies the content in the policy. The parameter string is escaped with backslashes to ensure that the embedded double quotation marks in the JSON policy are treated as literals in the parameter, which itself is surrounded by double quotation marks.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 263
X-Amz-Target: AWSOrganizationsV20161128.CreatePolicy
X-Amz-Date: 20160802T191136Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Content": "{\"Version\":\"2012-10-17\",\"Statement\":{\"Effect\":\"Allow\",\"Action\":
\"s3:*\"}}",
  "Type": "SERVICE_CONTROL_POLICY",
  "Description": "Enables admins of attached accounts to delegate all S3 permissions",
  "Name": "AllowAllS3Actions" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 394
Date: Tue, 02 Aug 2016 19:11:37 GMT

{
  "Policy": {
    "Content": "{\"Version\":\"2012-10-17\",\"Statement\":{\"Effect\":\"Allow\",\"Action\":
\"s3:*\"}}",
    "PolicySummary": {
      "Arn": "arn:aws:organizations::o-exampleorgid:policy/service_control_policy/p-
examplepolicyid111",
      "Description": "Allows delegation of all S3 actions",
      "Name": "AllowAllS3Actions",
      "Type":"SERVICE_CONTROL_POLICY"
    }
  }
}
```

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

DeclineHandshake

Declines a handshake request. This sets the handshake state to `DECLINED` and effectively deactivates the request.

This operation can be called only from the account that received the handshake. The originator of the handshake can use CancelHandshake (p. 17) instead. The originator can't reactivate a declined request, but can reinitiate the process with a new handshake request.

After you decline a handshake, it continues to appear in the results of relevant APIs for only 30 days. After that, it's deleted.

Request Syntax

```
{
    "HandshakeId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

HandshakeId (p. 56)

The unique identifier (ID) of the handshake that you want to decline. You can get the ID from the ListHandshakesForAccount (p. 164) operation.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: Yes

Response Syntax

```
{
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
```

```
            "Resources": [
                "HandshakeResource"
            ],
            "Type": "string",
            "Value": "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.

Handshake (p. 56)

A structure that contains details about the declined handshake. The state is updated to show the value `DECLINED`.

Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

HandshakeAlreadyInStateException

The specified handshake is already in the requested state. For example, you can't accept a handshake that was already accepted.

HTTP Status Code: 400

HandshakeNotFoundException

We can't find a handshake with the `HandshakeId` that you specified.

HTTP Status Code: 400

InvalidHandshakeTransitionException

You can't perform the operation on the handshake in its current state. For example, you can't cancel a handshake that was already accepted or accept a handshake that was already declined.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows Anaya declining an invitation to join Diego's organization. The `DeclineHandshake` operation returns a handshake object, showing that the state is now `DECLINED`.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 120
X-Amz-Target: AWSOrganizationsV20161128.DeclineHandshake
X-Amz-Date: 20161130T192859Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "HandshakeId": "h-examplehandshakeid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 689
Date: Mon, 30 Nov 2016 19:29:00 GMT

{
  "Handshake": {
    "Id": "h-examplehandshakeid111",
    "State": "DECLINED",
    "Resources": [
      {
        "Type": "ORGANIZATION",
        "Value": "o-exampleorgid",
        "Resources": [
          {
            "Type": "MASTER_EMAIL",
            "Value": "diego@example.com"
          },
          {
            "Type": "MASTER_NAME",
            "Value": "Master Account"
          }
        ]
      },
      {
        "Type": "EMAIL",
        "Value": "anaya@example.com"
      },
      {
        "Type": "NOTES",
        "Value": "This is an invitation to Anaya's account to join the Diego's
 organization."
      }
    ],
    "Parties": [
      {
```

```
      "Type": "EMAIL",
      "Id": "anaya@example.com"
    },
    {
      "Type": "ORGANIZATION",
      "Id": "o-exampleorgid"
    }
  ],
  "Action": "INVITE",
  "RequestedTimestamp": 1470684478.687,
  "ExpirationTimestamp": 1471980478.687,
  "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111"
  }
}
```

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

DeleteOrganization

Deletes the organization. You can delete an organization only by using credentials from the master account. The organization must be empty of member accounts.

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.

- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

OrganizationNotEmptyException

The organization isn't empty. To delete an organization, you must first remove all accounts except the master account, delete all OUs, and delete all policies.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to delete an organization. To perform this operation, you must be an admin of the master account in the organization. The example assumes that you previously removed all the member accounts, OUs, and policies from the organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 136
X-Amz-Target: AWSOrganizationsV20161128.DeleteOrganization
X-Amz-Date: 20160802T170640Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
```

```
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Tue, 02 Aug 2016 17:06:41 GMT
```

See Also

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

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

DeleteOrganizationalUnit

Deletes an organizational unit (OU) from a root or another OU. You must first remove all accounts and child OUs from the OU that you want to delete.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "OrganizationalUnitId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

OrganizationalUnitId (p. 64)

The unique identifier (ID) of the organizational unit that you want to delete. You can get the ID from the ListOrganizationalUnitsForParent (p. 175) operation.

The regex pattern for an organizational unit ID string requires "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^ou-[0-9a-z]{4,32}-[a-z0-9]{8,32}$`

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

OrganizationalUnitNotEmptyException

The specified OU is not empty. Move all accounts to another root or to other OUs, remove all child OUs, and try the operation again.

HTTP Status Code: 400

OrganizationalUnitNotFoundException

We can't find an OU with the `OrganizationalUnitId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to delete an OU. The example assumes that you previously removed all accounts and other OUs from the OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 136
X-Amz-Target: AWSOrganizationsV20161128.DeleteOrganizationalUnit
X-Amz-Date: 20160802T170640Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "OrganizationalUnitId": "ou-examplerootid111-exampleouid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Tue, 02 Aug 2016 17:06:41 GMT
```

See Also

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

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

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

DeletePolicy

Deletes the specified policy from your organization. Before you perform this operation, you must first detach the policy from all organizational units (OUs), roots, and accounts.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "PolicyId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyId (p. 68)

The unique identifier (ID) of the policy that you want to delete. You can get the ID from the ListPolicies (p. 185) or ListPoliciesForTarget (p. 190) operations.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyInUseException

The policy is attached to one or more entities. You must detach it from all roots, OUs, and accounts before performing this operation.

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to delete a policy from an organization. The example assumes that you previously detached the policy from all entities.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 135
X-Amz-Target: AWSOrganizationsV20161128.DeletePolicy
X-Amz-Date: 20160802T193159Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "PolicyId": "p-examplepolicyid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: c7c142fb-58e7-11e6-a8d8-d5a10f646b91
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Tue, 02 Aug 2016 19:31:59 GMT
```

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET

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

DescribeAccount

Retrieves AWS Organizations-related information about the specified account.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "AccountId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

AccountId (p. 72)

    The unique identifier (ID) of the AWS account that you want information about. You can get the ID from the ListAccounts (p. 139) or ListAccountsForParent (p. 144) operations.

    The regex pattern for an account ID string requires exactly 12 digits.

    Type: String

    Pattern: ^\d{12}$

    Required: Yes

Response Syntax

```
{
    "Account": {
        "Arn": "string",
        "Email": "string",
        "Id": "string",
        "JoinedMethod": "string",
        "JoinedTimestamp": number,
        "Name": "string",
        "Status": "string"
    }
}
```

Response Elements

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

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

Account (p. 72)

    A structure that contains information about the requested account.

Type: Account (p. 242) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccountNotFoundException

We can't find an AWS account with the `AccountId` that you specified, or the account whose credentials you used to make this request isn't a member of an organization.

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.

- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request information about member account 555555555555.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 85
X-Amz-Target: AWSOrganizationsV20161128.DescribeAccount
X-Amz-Date: 20161130T202237Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "AccountId": "555555555555" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 160
Date: Mon, 30 Nov 2016 20:22:39 GMT

{
  "Account": {
    "Id": "555555555555",
```

```
        "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/555555555555",
        "Name": "Beta account",
        "Email": "anika@example.com",
        "JoinedMethod": "INVITED",
        "JoinedTimeStamp": 1481756563.134,
        "Status": "ACTIVE"
    }
}
```

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

DescribeCreateAccountStatus

Retrieves the current status of an asynchronous request to create an account.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "CreateAccountRequestId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

CreateAccountRequestId (p. 76)

Specifies the operationId that uniquely identifies the request. You can get the ID from the response to an earlier CreateAccount (p. 22) request, or from the ListCreateAccountStatus (p. 159) operation.

The regex pattern for a create account request ID string requires "car-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: ^car-[a-z0-9]{8,32}$

Required: Yes

Response Syntax

```
{
    "CreateAccountStatus": {
        "AccountId": "string",
        "AccountName": "string",
        "CompletedTimestamp": number,
        "FailureReason": "string",
        "GovCloudAccountId": "string",
        "Id": "string",
        "RequestedTimestamp": 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.

CreateAccountStatus (p. 76)

A structure that contains the current status of an account creation request.

Type: CreateAccountStatus (p. 245) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

CreateAccountStatusNotFoundException

We can't find an create account request with the `CreateAccountRequestId` that you specified.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.

- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to request the latest status for a previous request to create an account in an organization. The specified `requestId` comes from the response of the original call to CreateAccount (p. 22). The account creation request shows by the `status` field that AWS Organizations successfully completed the creation of the account.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 240
X-Amz-Target: AWSOrganizationsV20161128.DescribeCreateAccountStatus
X-Amz-Date: 20161130T224016Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "CreateAccountRequestId": "car-examplecreateaccountrequestid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 356
Date: Thu, 04 Aug 2016 22:40:17 GMT

{
  "CreateAccountStatusRequest": {
    "State": "SUCCEEDED",
    "AccountId": "555555555555",
    "AccountName": "Beta account",
    "RequestedTimestamp": 1470684478.687,
    "CompletedTimestamp": 1470684532.472,
    "Id": "car-examplecreateaccountrequestid111"
  }
}
```

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

DescribeHandshake

Retrieves information about a previously requested handshake. The handshake ID comes from the response to the original InviteAccountToOrganization (p. 128) operation that generated the handshake.

You can access handshakes that are `ACCEPTED`, `DECLINED`, or `CANCELED` for only 30 days after they change to that state. They're then deleted and no longer accessible.

This operation can be called from any account in the organization.

Request Syntax

```
{
    "HandshakeId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

HandshakeId (p. 80)

The unique identifier (ID) of the handshake that you want information about. You can get the ID from the original call to InviteAccountToOrganization (p. 128), or from a call to ListHandshakesForAccount (p. 164) or ListHandshakesForOrganization (p. 169).

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: Yes

Response Syntax

```
{
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
                "Resources": [
```

```
            "HandshakeResource"
        ],
        "Type": "string",
        "Value": "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.

Handshake (p. 80)

> A structure that contains information about the specified handshake.
>
> Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

> You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*
>
> HTTP Status Code: 400

ConcurrentModificationException

> The target of the operation is currently being modified by a different request. Try again later.
>
> HTTP Status Code: 400

HandshakeNotFoundException

> We can't find a handshake with the `HandshakeId` that you specified.
>
> HTTP Status Code: 400

InvalidInputException

> The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:
>
> > **Note**
> > Some of the reasons in the following list might not be applicable to this specific API or operation:
>
> - IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
> - INPUT_REQUIRED: You must include a value for all required parameters.
> - INVALID_ENUM: You specified an invalid value.
> - INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
> - INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.

- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request details about a handshake.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 120
X-Amz-Target: AWSOrganizationsV20161128.DescribeHandshake
X-Amz-Date: 20161130T172756Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "HandshakeId": "h-examplehandshakeid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 609
Date: Tue, 30 Nov 2016 17:27:57 GMT

{
  "Handshake": {
    "Id": "h-examplehandshakeid111",
    "State": "OPEN",
    "Resources": [
      {
        "Type": "ORGANIZATION",
        "Value": "o-exampleorgid",
        "Resources": [
          {
            "Type": "MASTER_EMAIL",
            "Value": "diego@example.com"
          },
          {
            "Type": "MASTER_NAME",
            "Value": "Master Account"
          }
        ]
      },
      {
        "Type": "EMAIL",
        "Value": "anika@example.com"
      }
    ],
    "Parties": [
      {
        "Type": "ORGANIZATION",
        "Id": "o-exampleorgid"
      },
      {
        "Type": "EMAIL",
        "Id": "anika@example.com"
      }
    ],
    "Action": "INVITE",
    "RequestedTimestamp": 1470158698.046,
    "ExpirationTimestamp": 1471454698.046,
    "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111"
  }
}
```

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

DescribeOrganization

Retrieves information about the organization that the user's account belongs to.

This operation can be called from any account in the organization.

> **Note**
> Even if a policy type is shown as available in the organization, you can disable it separately at
> the root level with DisablePolicyType (p. 106). Use ListRoots (p. 195) to see the status of
> policy types for a specified root.

Response Syntax

```
{
    "Organization": {
        "Arn": "string",
        "AvailablePolicyTypes": [
            {
                "Status": "string",
                "Type": "string"
            }
        ],
        "FeatureSet": "string",
        "Id": "string",
        "MasterAccountArn": "string",
        "MasterAccountEmail": "string",
        "MasterAccountId": "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.

Organization (p. 85)

A structure that contains information about the organization.

Type: Organization (p. 254) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making
the request must have at least one IAM permissions policy attached that grants the required
permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials
of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request information about the current user's organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.DescribeOrganization
X-Amz-Date: 20161130T170925Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 247
Date: Tue, 30 Nov 2016 17:09:26 GMT

{
  "Organization": {
    "MasterAccountArn": "arn:aws:organizations::111111111111:account/o-
exampleorgid/111111111111",
    "MasterAccountEmail": "diego@example.com",
    "MasterAccountId": "111111111111",
    "Id": "o-exampleorgid",
    "FeatureSet": "ALL",
```

```
    "Arn": "arn:aws:organizations::111111111111:organization/o-exampleorgid",
    "AvailablePolicyTypes": [
      {
        "Status": "ENABLED",
        "Type": "SERVICE_CONTROL_POLICY"
      }
    ]
  }
}
```

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

DescribeOrganizationalUnit

Retrieves information about an organizational unit (OU).

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "OrganizationalUnitId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 268).

The request accepts the following data in JSON format.

OrganizationalUnitId (p. 88)

> The unique identifier (ID) of the organizational unit that you want details about. You can get the ID
> from the ListOrganizationalUnitsForParent (p. 175) operation.
>
> The regex pattern for an organizational unit ID string requires "ou-" followed by from 4 to 32 lower-
> case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from
> 8 to 32 additional lower-case letters or digits.
>
> Type: String
>
> Pattern: `^ou-[0-9a-z]{4,32}-[a-z0-9]{8,32}$`
>
> Required: Yes

Response Syntax

```
{
    "OrganizationalUnit": {
        "Arn": "string",
        "Id": "string",
        "Name": "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.

OrganizationalUnit (p. 88)

> A structure that contains details about the specified OU.
>
> Type: OrganizationalUnit (p. 256) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor.`
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

OrganizationalUnitNotFoundException

We can't find an OU with the `OrganizationalUnitId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request details about an OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 136
X-Amz-Target: AWSOrganizationsV20161128.DescribeOrganizationalUnit
X-Amz-Date: 20160802T173153Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "OrganizationalUnitId": "ou-examplerootid111-exampleouid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 172
Date: Tue, 02 Aug 2016 17:31:54 GMT

{
  "OrganizationalUnit": {
    "Name": "Accounting Group",
    "Arn": "arn:aws:organizations::o-exampleorgid:ou/o-exampleorgid/ou-examplerootid111-
exampleouid111",
    "Id": "ou-examplerootid111-exampleouid111"
  }
```

```
}
```

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

DescribePolicy

Retrieves information about a policy.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "PolicyId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyId (p. 92)

The unique identifier (ID) of the policy that you want details about. You can get the ID from the ListPolicies (p. 185) or ListPoliciesForTarget (p. 190) operations.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: Yes

Response Syntax

```
{
    "Policy": {
        "Content": "string",
        "PolicySummary": {
            "Arn": "string",
            "AwsManaged": boolean,
            "Description": "string",
            "Id": "string",
            "Name": "string",
            "Type": "string"
        }
    }
}
```

Response Elements

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

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

Policy (p. 92)

A structure that contains details about the specified policy.

Type: Policy (p. 259) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.

- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to request information about a policy.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 135
X-Amz-Target: AWSOrganizationsV20161128.DescribePolicy
X-Amz-Date: 20160802T191836Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=ef1d4e307c902329aad4c1b686fc29ca24a6d2c59b48285c6a28528bc8403be7

{ "PolicyId": "p-examplepolicyid111" }
```

Sample Response

```
HTTP/1.1 200 OK
```

```
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 394
Date: Tue, 02 Aug 2016 19:18:37 GMT

{
  "Policy": {
    "Content": "{\n  \"Version\": \"2012-10-17\",\n  \"Statement\": [\n    {\n
 \"Effect\": \"Allow\",\n       \"Action\": \"*\",\n       \"Resource\": \"*\"\n    }\n
  ]\n}",
    "PolicySummary": {
      "Arn": "arn:aws:organizations::111111111111:policy/o-exampleorgid/
service_control_policy/p-examplepolicyid111",
      "Type": "SERVICE_CONTROL_POLICY",
      "Id": "p-examplepolicyid111",
      "AwsManaged": false,
      "Name": "AllowAllS3Actions",
      "Description": "Enables admins to delegate S3 permissions"
    }
  }
}
```

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

DetachPolicy

Detaches a policy from a target root, organizational unit (OU), or account. If the policy being detached is a service control policy (SCP), the changes to permissions for IAM users and roles in affected accounts are immediate.

Note: Every root, OU, and account must have at least one SCP attached. If you want to replace the default `FullAWSAccess` policy with one that limits the permissions that can be delegated, you must attach the replacement policy before you can remove the default one. This is the authorization strategy of whitelisting. If you instead attach a second SCP and leave the `FullAWSAccess` SCP still attached, and specify `"Effect": "Deny"` in the second SCP to override the `"Effect": "Allow"` in the `FullAWSAccess` policy (or any other attached SCP), you're using the authorization strategy of blacklisting .

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "PolicyId": "string",
    "TargetId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyId (p. 96)

The unique identifier (ID) of the policy you want to detach. You can get the ID from the ListPolicies (p. 185) or ListPoliciesForTarget (p. 190) operations.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: Yes

TargetId (p. 96)

The unique identifier (ID) of the root, OU, or account that you want to detach the policy from. You can get the ID from the ListRoots (p. 195), ListOrganizationalUnitsForParent (p. 175), or ListAccounts (p. 139) operations.

The regex pattern for a target ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Account** - A string that consists of exactly 12 digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

> **Note**
> Deleted and closed accounts still count toward your limit.

> **Important**
> If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.
- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.

- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyNotAttachedException

The policy isn't attached to the specified target in the specified root.

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to detach a policy from an OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 275
X-Amz-Target: AWSOrganizationsV20161128.DetachPolicy
X-Amz-Date: 20160808T215156Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "TargetId": "ou-examplerootid111-exampleouid111", "PolicyId": "p-examplepolicyid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Mon, 08 Aug 2016 21:51:56 GMT
```

See Also

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

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

DisableAWSServiceAccess

Disables the integration of an AWS service (the service that is specified by `ServicePrincipal`) with AWS Organizations. When you disable integration, the specified service no longer can create a service-linked role in *new* accounts in your organization. This means the service can't perform operations on your behalf on any new accounts in your organization. The service can still perform operations in older accounts until the service completes its clean-up from AWS Organizations.

> **Important**
> We recommend that you disable integration between AWS Organizations and the specified AWS service by using the console or commands that are provided by the specified service. Doing so ensures that the other service is aware that it can clean up any resources that are required only for the integration. How the service cleans up its resources in the organization's accounts depends on that service. For more information, see the documentation for the other AWS service.

After you perform the `DisableAWSServiceAccess` operation, the specified service can no longer perform operations in your organization's accounts unless the operations are explicitly permitted by the IAM policies that are attached to your roles.

For more information about integrating other services with AWS Organizations, including the list of services that work with Organizations, see Integrating AWS Organizations with Other AWS Services in the *AWS Organizations User Guide.*

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "ServicePrincipal": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

ServicePrincipal (p. 101)

The service principal name of the AWS service for which you want to disable integration with your organization. This is typically in the form of a URL, such as *service-abbreviation*.amazonaws.com.

Type: String

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

Pattern: `[\w+=,.@-]*`

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  Note
  Deleted and closed accounts still count toward your limit.

  Important
  If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.
- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.

- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to disable integration with an AWS service.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: AWSOrganizationsV20161128.DisableAWSServiceAccess
Content-Type: application/x-amz-json-1.1
User-Agent: aws-cli/1.11.143 Python/3.6.1 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.7.1
X-Amz-Date: 20171020T173354Z
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
```

```
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG
Content-Length: 46

{"ServicePrincipal": "anAwsService.amazonaws.com"}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Fri, 20 Oct 2017 17:33:54 GMT
```

See Also

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

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

DisablePolicyType

Disables an organizational control policy type in a root. A policy of a certain type can be attached to entities in a root only if that type is enabled in the root. After you perform this operation, you no longer can attach policies of the specified type to that root or to any organizational unit (OU) or account in that root. You can undo this by using the EnablePolicyType (p. 122) operation.

This is an asynchronous request that AWS performs in the background. If you disable a policy for a root, it still appears enabled for the organization if all features are enabled for the organization. AWS recommends that you first use ListRoots (p. 195) to see the status of policy types for a specified root, and then use this operation.

This operation can be called only from the organization's master account.

To view the status of available policy types in the organization, use DescribeOrganization (p. 85).

Request Syntax

```
{
    "PolicyType": "string",
    "RootId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyType (p. 106)

The policy type that you want to disable in this root.

Type: String

Valid Values: SERVICE_CONTROL_POLICY

Required: Yes

RootId (p. 106)

The unique identifier (ID) of the root in which you want to disable a policy type. You can get the ID from the ListRoots (p. 195) operation.

The regex pattern for a root ID string requires "r-" followed by from 4 to 32 lower-case letters or digits.

Type: String

Pattern: ^r-[0-9a-z]{4,32}$

Required: Yes

Response Syntax

```
{
```

```
    "Root": {
        "Arn": "string",
        "Id": "string",
        "Name": "string",
        "PolicyTypes": [
            {
                "Status": "string",
                "Type": "string"
            }
        ]
    }
}
```

Response Elements

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

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

Root (p. 106)

A structure that shows the root with the updated list of enabled policy types.

Type: Root (p. 265) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This

account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyTypeNotEnabledException

The specified policy type isn't currently enabled in this root. You can't attach policies of the specified type to entities in a root until you enable that type in the root. For more information, see Enabling All Features in Your Organization in the *AWS Organizations User Guide.*

HTTP Status Code: 400

RootNotFoundException

We can't find a root with the `RootId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to disable the service control policy (SCP) policy type in a root. The response shows that the `PolicyTypes` response element no longer includes `SERVICE_CONTROL_POLICY`.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 275
X-Amz-Target: AWSOrganizationsV20161128.DisablePolicyType
X-Amz-Date: 20160808T215156Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "RootId": "r-examplerootid111", "PolicyType": "SERVICE_CONTROL_POLICY" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 138
Date: Mon, 08 Aug 2016 18:03:54 GMT
Connection: Keep-alive
```

```
{
  "Root": {
    "PolicyTypes": [],
    "Name": "Root",
    "Id": "r-examplerootid111",
    "Arn": "arn:aws:organizations::111111111111:root/o-exampleorgid/r-examplerootid111"
  }
}
```

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

EnableAllFeatures

Enables all features in an organization. This enables the use of organization policies that can restrict the services and actions that can be called in each account. Until you enable all features, you have access only to consolidated billing, and you can't use any of the advanced account administration features that AWS Organizations supports. For more information, see Enabling All Features in Your Organization in the *AWS Organizations User Guide.*

> **Important**
> This operation is required only for organizations that were created explicitly with only the consolidated billing features enabled. Calling this operation sends a handshake to every invited account in the organization. The feature set change can be finalized and the additional features enabled only after all administrators in the invited accounts approve the change by accepting the handshake.

After you enable all features, you can separately enable or disable individual policy types in a root using EnablePolicyType (p. 122) and DisablePolicyType (p. 106). To see the status of policy types in a root, use ListRoots (p. 195).

After all invited member accounts accept the handshake, you finalize the feature set change by accepting the handshake that contains `"Action": "ENABLE_ALL_FEATURES"`. This completes the change.

After you enable all features in your organization, the master account in the organization can apply policies on all member accounts. These policies can restrict what users and even administrators in those accounts can do. The master account can apply policies that prevent accounts from leaving the organization. Ensure that your account administrators are aware of this.

This operation can be called only from the organization's master account.

Response Syntax

```
{
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
                "Resources": [
                    "HandshakeResource"
                ],
                "Type": "string",
                "Value": "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.

Handshake (p. 112)

A structure that contains details about the handshake created to support this request to enable all features in the organization.

Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

HandshakeConstraintViolationException

The requested operation would violate the constraint identified in the reason code.

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. Note that deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get this exception immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- ALREADY_IN_AN_ORGANIZATION: The handshake request is invalid because the invited account is already a member of an organization.
- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- INVITE_DISABLED_DURING_ENABLE_ALL_FEATURES: You can't issue new invitations to join an organization while it's in the process of enabling all features. You can resume inviting accounts after you finalize the process when all accounts have agreed to the change.
- ORGANIZATION_ALREADY_HAS_ALL_FEATURES: The handshake request is invalid because the organization has already enabled all features.
- ORGANIZATION_FROM_DIFFERENT_SELLER_OF_RECORD: The request failed because the account is from a different marketplace than the accounts in the organization. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be from the same marketplace.

- ORGANIZATION_MEMBERSHIP_CHANGE_RATE_LIMIT_EXCEEDED: You attempted to change the membership of an account too quickly after its previous change.
- PAYMENT_INSTRUMENT_REQUIRED: You can't complete the operation with an account that doesn't have a payment instrument, such as a credit card, associated with it.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Examples

This example shows the administrator asking all the invited accounts in the organization to approve enabled all features in the organization. AWS Organizations sends an email to the address that is registered with every invited member account asking the owner to approve the change to all features by accepting the handshake that is sent. After all invited member accounts accept the handshake, the organization administrator can finalize the change to all features, and those with appropriate permissions can create policies and apply them to roots, organizational units (OUs), and accounts.

Example

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 103
X-Amz-Target: AWSOrganizationsV20161128.EnableAllFeatures
X-Amz-Date: 20160801T180353Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160801/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Example

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Mon, 08 Aug 2016 21:51:56 GMT

{
  "Handshake": {
    "Action": "ENABLE_ALL_FEATURES",
    "Arn":"arn:aws:organizations::111111111111:handshake/o-exampleorgid/
enable_all_features/h-examplehandshakeid111",
    "ExpirationTimestamp":1.483127868609E9,
    "Id":"h-examplehandshakeid111",
    "Parties": [
      {
        "id":"o-exampleorgid",
        "type":"ORGANIZATION"
      }
    ],
    "requestedTimestamp":1.481831868609E9,
    "resources": [
```

```
    {
      "type":"ORGANIZATION",
      "value":"o-exampleorgid"
    }
  ],
  "state":"REQUESTED"
  }
}
```

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

EnableAWSServiceAccess

Enables the integration of an AWS service (the service that is specified by `ServicePrincipal`) with AWS Organizations. When you enable integration, you allow the specified service to create a service-linked role in all the accounts in your organization. This allows the service to perform operations on your behalf in your organization and its accounts.

Important
We recommend that you enable integration between AWS Organizations and the specified AWS service by using the console or commands that are provided by the specified service. Doing so ensures that the service is aware that it can create the resources that are required for the integration. How the service creates those resources in the organization's accounts depends on that service. For more information, see the documentation for the other AWS service.

For more information about enabling services to integrate with AWS Organizations, see Integrating AWS Organizations with Other AWS Services in the *AWS Organizations User Guide.*

This operation can be called only from the organization's master account and only if the organization has enabled all features.

Request Syntax

```
{
    "ServicePrincipal": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

ServicePrincipal (p. 117)

The service principal name of the AWS service for which you want to enable integration with your organization. This is typically in the form of a URL, such as *service-abbreviation*.amazonaws.com.

Type: String

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

Pattern: [\w+=,.@-]*

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  Note
  Deleted and closed accounts still count toward your limit.

  Important
  If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that

corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.

- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to enable integration with another AWS service.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: AWSOrganizationsV20161128.EnableAWSServiceAccess
Content-Type: application/x-amz-json-1.1
User-Agent: aws-cli/1.11.143 Python/3.6.1 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.7.1
X-Amz-Date: 20171020T173308Z
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG
Content-Length: 46

{"ServicePrincipal": "anAwsService.amazonaws.com"}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Fri, 20 Oct 2017 17:33:54 GMT
```

See Also

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

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

EnablePolicyType

Enables a policy type in a root. After you enable a policy type in a root, you can attach policies of that type to the root, any organizational unit (OU), or account in that root. You can undo this by using the DisablePolicyType (p. 106) operation.

This is an asynchronous request that AWS performs in the background. AWS recommends that you first use ListRoots (p. 195) to see the status of policy types for a specified root, and then use this operation.

This operation can be called only from the organization's master account.

You can enable a policy type in a root only if that policy type is available in the organization. To view the status of available policy types in the organization, use DescribeOrganization (p. 85).

Request Syntax

```
{
    "PolicyType": "string",
    "RootId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

PolicyType (p. 122)

> The policy type that you want to enable.
>
> Type: String
>
> Valid Values: SERVICE_CONTROL_POLICY
>
> Required: Yes

RootId (p. 122)

> The unique identifier (ID) of the root in which you want to enable a policy type. You can get the ID from the ListRoots (p. 195) operation.
>
> The regex pattern for a root ID string requires "r-" followed by from 4 to 32 lower-case letters or digits.
>
> Type: String
>
> Pattern: ^r-[0-9a-z]{4,32}$
>
> Required: Yes

Response Syntax

```
{
```

```
    "Root": {
        "Arn": "string",
        "Id": "string",
        "Name": "string",
        "PolicyTypes": [
            {
                "Status": "string",
                "Type": "string"
            }
        ]
    }
}
```

Response Elements

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

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

Root (p. 122)

A structure that shows the root with the updated list of enabled policy types.

Type: Root (p. 265) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This

account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.
- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.
- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.
- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyTypeAlreadyEnabledException

The specified policy type is already enabled in the specified root.

HTTP Status Code: 400

PolicyTypeNotAvailableForOrganizationException

You can't use the specified policy type with the feature set currently enabled for this organization. For example, you can enable SCPs only after you enable all features in the organization. For more

information, see Enabling and Disabling a Policy Type on a Root in the *AWS Organizations User Guide.*

HTTP Status Code: 400

RootNotFoundException

We can't find a root with the `RootId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to enable the service control policy (SCP) policy type in a root. The output shows a root object with a `policyTypes` response element showing that SCPs are now enabled.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 275
X-Amz-Target: AWSOrganizationsV20161128.EnablePolicyType
X-Amz-Date: 20160808T215156Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "RootId": "r-examplerootid111", "PolicyType": "SERVICE_CONTROL_POLICY" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 138
```

```
Date: Mon, 08 Aug 2016 18:03:54 GMT
Connection: Keep-alive

{
  "Root": {
    "PolicyTypes": [
      {
        "Status":"ENABLED",
        "Type":"SERVICE_CONTROL_POLICY"
      }
    ],
    "Id": "r-examplerootid111",
    "Name": "Root",
    "Arn": "arn:aws:organizations::111111111111:root/o-exampleorgid/r-examplerootid111"
  }
}
```

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

InviteAccountToOrganization

Sends an invitation to another account to join your organization as a member account. AWS Organizations sends email on your behalf to the email address that is associated with the other account's owner. The invitation is implemented as a Handshake (p. 248) whose details are in the response.

Important

- You can invite AWS accounts only from the same seller as the master account. For example, if your organization's master account was created by Amazon Internet Services Pvt. Ltd (AISPL), an AWS seller in India, you can invite only other AISPL accounts to your organization. You can't combine accounts from AISPL and AWS or from any other AWS seller. For more information, see Consolidated Billing in India.
- If you receive an exception that indicates that you exceeded your account limits for the organization or that the operation failed because your organization is still initializing, wait one hour and then try again. If the error persists after an hour, contact AWS Support.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "Notes": "string",
    "Target": {
        "Id": "string",
        "Type": "string"
    }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Notes (p. 128)

Additional information that you want to include in the generated email to the recipient account owner.

Type: String

Length Constraints: Maximum length of 1024.

Required: No

Target (p. 128)

The identifier (ID) of the AWS account that you want to invite to join your organization. This is a JSON object that contains the following elements:

```
{ "Type": "ACCOUNT", "Id": "< account id number >" }
```

If you use the AWS CLI, you can submit this as a single string, similar to the following example:

```
--target Id=123456789012,Type=ACCOUNT
```

If you specify `"Type": "ACCOUNT"`, you must provide the AWS account ID number as the `Id`. If you specify `"Type": "EMAIL"`, you must specify the email address that is associated with the account.

`--target Id=diego@example.com,Type=EMAIL`

Type: HandshakeParty (p. 252) object

Required: Yes

Response Syntax

```
{
    "Handshake": {
        "Action": "string",
        "Arn": "string",
        "ExpirationTimestamp": number,
        "Id": "string",
        "Parties": [
            {
                "Id": "string",
                "Type": "string"
            }
        ],
        "RequestedTimestamp": number,
        "Resources": [
            {
                "Resources": [
                    "HandshakeResource"
                ],
                "Type": "string",
                "Value": "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.

Handshake (p. 129)

A structure that contains details about the handshake that is created to support this invitation request.

Type: Handshake (p. 248) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccountOwnerNotVerifiedException

You can't invite an existing account to your organization until you verify that you own the email address associated with the master account. For more information, see Email Address Verification in the *AWS Organizations User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

DuplicateHandshakeException

A handshake with the same action and target already exists. For example, if you invited an account to join your organization, the invited account might already have a pending invitation from this organization. If you intend to resend an invitation to an account, ensure that existing handshakes that might be considered duplicates are canceled or declined.

HTTP Status Code: 400

FinalizingOrganizationException

AWS Organizations couldn't perform the operation because your organization hasn't finished initializing. This can take up to an hour. Try again later. If after one hour you continue to receive this error, contact AWS Support.

HTTP Status Code: 400

HandshakeConstraintViolationException

The requested operation would violate the constraint identified in the reason code.

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. Note that deleted and closed accounts still count toward your limit.

    > **Important**
    > If you get this exception immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- ALREADY_IN_AN_ORGANIZATION: The handshake request is invalid because the invited account is already a member of an organization.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- INVITE_DISABLED_DURING_ENABLE_ALL_FEATURES: You can't issue new invitations to join an organization while it's in the process of enabling all features. You can resume inviting accounts after you finalize the process when all accounts have agreed to the change.

- ORGANIZATION_ALREADY_HAS_ALL_FEATURES: The handshake request is invalid because the organization has already enabled all features.

- ORGANIZATION_FROM_DIFFERENT_SELLER_OF_RECORD: The request failed because the account is from a different marketplace than the accounts in the organization. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be from the same marketplace.
- ORGANIZATION_MEMBERSHIP_CHANGE_RATE_LIMIT_EXCEEDED: You attempted to change the membership of an account too quickly after its previous change.
- PAYMENT_INSTRUMENT_REQUIRED: You can't complete the operation with an account that doesn't have a payment instrument, such as a credit card, associated with it.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows the master account owned by diego@example.com inviting the account owned by juan@example.com to join an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 53
X-Amz-Target: AWSOrganizationsV20161128.InviteAccountToOrganization
X-Amz-Date: 20161213T191417Z
User-Agent: aws-cli/1.11.13 Python/2.7.8 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.4.70
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Notes": "This is a request for Juan's account to join Diego's organization", "Target":
 {"Type": "EMAIL", "Id": "juan@example.com"} }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 644
Date: Tue, 13 Dec 2016 19:14:20 GMT

{
  "Handshake": {
    "Action": "INVITE",
    "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
    "ExpirationTimestamp": 1482952459.257,
    "Id": "h-examplehandshakeid111",
    "Parties": [
      {
        "Id": "o-exampleorgid",
        "Type": "ORGANIZATION"
      },
      {
        "Id": "juan@example.com",
        "Type": "EMAIL"
      }
    ],
```

```
      "RequestedTimestamp": 1481656459.257,
      "Resources": [
        {
          "Resources": [
            {
              "Type": "MASTER_EMAIL",
              "Value": "diego@example.com"
            },
            {
              "Type": "MASTER_NAME",
              "Value": "Org Master Account"
            },
            {
              "Type": "ORGANIZATION_FEATURE_SET",
              "Value": "FULL"
            }
          ],
          "Type": "ORGANIZATION",
          "Value": "o-exampleorgid"
        },
        {
          "Type": "EMAIL",
          "Value": "juan@example.com"
        }
      ],
      "State": "OPEN"
    }
}
```

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

LeaveOrganization

Removes a member account from its parent organization. This version of the operation is performed by the account that wants to leave. To remove a member account as a user in the master account, use RemoveAccountFromOrganization (p. 213) instead.

This operation can be called only from a member account in the organization.

> **Important**
>
> - The master account in an organization with all features enabled can set service control policies (SCPs) that can restrict what administrators of member accounts can do, including preventing them from successfully calling `LeaveOrganization` and leaving the organization.
> - You can leave an organization as a member account only if the account is configured with the information required to operate as a standalone account. When you create an account in an organization using the AWS Organizations console, API, or CLI commands, the information required of standalone accounts is *not* automatically collected. For each account that you want to make standalone, you must accept the end user license agreement (EULA), choose a support plan, provide and verify the required contact information, and provide a current payment method. AWS uses the payment method to charge for any billable (not free tier) AWS activity that occurs while the account isn't attached to an organization. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
> - You can leave an organization only after you enable IAM user access to billing in your account. For more information, see Activating Access to the Billing and Cost Management Console in the *AWS Billing and Cost Management User Guide.*

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccountNotFoundException

We can't find an AWS account with the `AccountId` that you specified, or the account whose credentials you used to make this request isn't a member of an organization.

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  Note
  Deleted and closed accounts still count toward your limit.

  Important
  If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.

- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

MasterCannotLeaveOrganizationException

You can't remove a master account from an organization. If you want the master account to become a member account in another organization, you must first delete the current organization of the master account.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to remove your member account from an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.LeaveOrganization
X-Amz-Date: 20161130T194454Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Mon, 30 Nov 2016 19:44:56 GMT
```

See Also

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

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

ListAccounts

Lists all the accounts in the organization. To request only the accounts in a specified root or organizational unit (OU), use the ListAccountsForParent (p. 144) operation instead.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 139)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 139)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
```

```
    "Accounts": [
        {
            "Arn": "string",
            "Email": "string",
            "Id": "string",
            "JoinedMethod": "string",
            "JoinedTimestamp": number,
            "Name": "string",
            "Status": "string"
        }
    ],
    "NextToken": "string"
}
```

Response Elements

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

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

Accounts (p. 139)

A list of objects in the organization.

Type: Array of Account (p. 242) objects

NextToken (p. 139)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request a list of all the accounts in an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.ListAccounts
X-Amz-Date: 20161130T220225Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
   Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
   SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
   Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 711
Date: Mon, 30 Nov 2016 22:02:26 GMT

{
  "Accounts": [
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/111111111111",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481830215.45,
      "Id": "111111111111",
      "Name": "Master Account",
      "Email": "diego@example.com",
      "Status": "ACTIVE"
    },
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/222222222222",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481835741.044,
      "Id": "222222222222",
      "Name": "Production Account",
      "Email": "alice@example.com",
      "Status": "ACTIVE"
    },
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/333333333333",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481835795.536,
      "Id": "333333333333",
      "Name": "Development Account",
      "Email": "juan@example.com",
      "Status": "ACTIVE"
    },
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/444444444444",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481835812.143,
      "Id": "444444444444",
      "Name": "Test Account",
      "Email": "anika@example.com",
      "Status": "ACTIVE"
    }
```

```
    ]
}
```

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

ListAccountsForParent

Lists the accounts in an organization that are contained by the specified target root or organizational unit (OU). If you specify the root, you get a list of all the accounts that aren't in any OU. If you specify an OU, you get a list of all the accounts in only that OU and not in any child OUs. To get a list of all accounts in the organization, use the ListAccounts (p. 139) operation.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 144)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 144)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

ParentId (p. 144)

The unique identifier (ID) for the parent root or organization unit (OU) whose accounts you want to list.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

Response Syntax

```
{
    "Accounts": [
        {
            "Arn": "string",
            "Email": "string",
            "Id": "string",
            "JoinedMethod": "string",
            "JoinedTimestamp": number,
            "Name": "string",
            "Status": "string"
        }
    ],
    "NextToken": "string"
}
```

Response Elements

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

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

Accounts (p. 145)

A list of the accounts in the specified root or OU.

Type: Array of Account (p. 242) objects

NextToken (p. 145)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ParentNotFoundException

We can't find a root or OU with the `ParentId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request a list of the accounts in an OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.ListAccountsForParent
X-Amz-Date: 20161130T220225Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ParentId": "ou-examplerootid111-exampleouid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 711
Date: Mon, 30 Nov 2016 22:02:26 GMT

{
  "Accounts": [
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/333333333333",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481835795.536,
      "Id": "333333333333",
      "Name": "Development Account",
      "Email": "juan@example.com",
      "Status": "ACTIVE"
    },
    {
      "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/444444444444",
      "JoinedMethod": "INVITED",
      "JoinedTimestamp": 1481835812.143,
      "Id": "444444444444",
      "Name": "Test Account",
      "Email": "anika@example.com",
      "Status": "ACTIVE"
```

```
    }
  ]
}
```

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

ListAWSServiceAccessForOrganization

Returns a list of the AWS services that you enabled to integrate with your organization. After a service on this list creates the resources that it requires for the integration, it can perform operations on your organization and its accounts.

For more information about integrating other services with AWS Organizations, including the list of services that currently work with Organizations, see Integrating AWS Organizations with Other AWS Services in the *AWS Organizations User Guide.*

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 149)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 149)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "EnabledServicePrincipals": [
```

```
        {
            "DateEnabled": number,
            "ServicePrincipal": "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.

EnabledServicePrincipals (p. 149)

A list of the service principals for the services that are enabled to integrate with your organization. Each principal is a structure that includes the name and the date that it was enabled for integration with AWS Organizations.

Type: Array of EnabledServicePrincipal (p. 247) objects

NextToken (p. 149)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This

account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to get the list of services for which integration with AWS Organizations is enabled.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: AWSOrganizationsV20161128.ListAWSServiceAccessForOrganization
Content-Type: application/x-amz-json-1.1
User-Agent: aws-cli/1.11.143 Python/3.6.1 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.7.1
X-Amz-Date: 20171020T173536Z
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG
Content-Length: 2

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 74
Date: Fri, 20 Oct 2017 17:35:37 GMT

{"ServiceList":["awsservice1.amazonaws.com","awsservice2.amazonaws.com"]}
```

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

ListChildren

Lists all of the organizational units (OUs) or accounts that are contained in the specified parent OU or root. This operation, along with ListParents (p. 180) enables you to traverse the tree structure that makes up this root.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "ChildType": "string",
    "MaxResults": number,
    "NextToken": "string",
    "ParentId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

ChildType (p. 154)

Filters the output to include only the specified child type.

Type: String

Valid Values: `ACCOUNT | ORGANIZATIONAL_UNIT`

Required: Yes

MaxResults (p. 154)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 154)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

ParentId (p. 154)

The unique identifier (ID) for the parent root or OU whose children you want to list.

The regex pattern for a parent ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

Response Syntax

```
{
    "Children": [
        {
            "Id": "string",
            "Type": "string"
        }
    ],
    "NextToken": "string"
}
```

Response Elements

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

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

Children (p. 155)

The list of children of the specified parent container.

Type: Array of Child (p. 244) objects

NextToken (p. 155)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor.`
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ParentNotFoundException

We can't find a root or OU with the `ParentId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to request a list of all of the child OUs in a parent root or OU.

Sample Request

```
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
X-Amz-Target: AWSOrganizationsV20161128.ListChildren
X-Amz-Date: 20170215T155359Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20170215/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{
  "ChildType": "ORGANIZATIONAL_UNIT",
  "ParentId": "ou-examplerootid111-exampleouid111"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 124
Date: Wed, 15 Feb 2017 15:53:59 GMT

{
  "Children": [
    {
      "Id": "ou-examplerootid111-exampleouid111",
      "Type":"ORGANIZATIONAL_UNIT"
    },
    {
      "Id":"ou-examplerootid111-exampleouid222",
      "Type":"ORGANIZATIONAL_UNIT"
    }
  ]
```

```
}
```

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

ListCreateAccountStatus

Lists the account creation requests that match the specified status that is currently being tracked for the organization.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 159)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 159)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

States (p. 159)

A list of one or more states that you want included in the response. If this parameter isn't present, all requests are included in the response.

Type: Array of strings

Valid Values: `IN_PROGRESS | SUCCEEDED | FAILED`

Required: No

Response Syntax

```
{
    "CreateAccountStatuses": [
        {
            "AccountId": "string",
            "AccountName": "string",
            "CompletedTimestamp": number,
            "FailureReason": "string",
            "GovCloudAccountId": "string",
            "Id": "string",
            "RequestedTimestamp": number,
            "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.

CreateAccountStatuses (p. 160)

A list of objects with details about the requests. Certain elements, such as the accountId number, are present in the output only after the account has been successfully created.

Type: Array of CreateAccountStatus (p. 245) objects

NextToken (p. 160)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Examples

Example

The following example shows how to request a list of account creation requests for an organization that have completed successfully.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
X-Amz-Target: AWSOrganizationsV20161128.ListCreateAccountStatus
X-Amz-Date: 20161130T155359Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "States": "SUCCEEDED" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 895
Date: Fri, 30 Nov 2016 15:54:01 GMT

{
  "CreateAccountStatuses": [
    {
      "AccountId": "444444444444",
      "AccountName": "Developer Test Account",
      "CompletedTimeStamp": 1481835812.143,
      "Id": "car-examplecreateaccountrequestid111",
      "RequestedTimeStamp": 1481829432.531,
      "State": "SUCCEEDED"
    }
  ]
}
```

Example

The following example gets a list of in-progress account creation requests for an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 33
X-Amz-Target: AWSOrganizationsV20161128.ListCreateAccountStatus
X-Amz-Date: 20161130T155359Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "States": "IN_PROGRESS" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 895
Date: Fri, 30 Nov 2016 15:54:01 GMT

{
  "CreateAccountStatuses": [
    {
      "State": "IN_PROGRESS",
      "Id": "car-examplecreateaccountrequestid111",
      "RequestedTimeStamp": 1481829432.531,
      "AccountName": "Production Account"
    }
  ]
}
```

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

ListHandshakesForAccount

Lists the current handshakes that are associated with the account of the requesting user.

Handshakes that are `ACCEPTED`, `DECLINED`, or `CANCELED` appear in the results of this API for only 30 days after changing to that state. After that, they're deleted and no longer accessible.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called from any account in the organization.

Request Syntax

```
{
    "Filter": {
        "ActionType": "string",
        "ParentHandshakeId": "string"
    },
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Filter (p. 164)

Filters the handshakes that you want included in the response. The default is all types. Use the `ActionType` element to limit the output to only a specified type, such as `INVITE`, `ENABLE_ALL_FEATURES`, or `APPROVE_ALL_FEATURES`. Alternatively, for the `ENABLE_ALL_FEATURES` handshake that generates a separate child handshake for each member account, you can specify `ParentHandshakeId` to see only the handshakes that were generated by that parent request.

Type: HandshakeFilter (p. 251) object

Required: No

MaxResults (p. 164)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 164)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "Handshakes": [
        {
            "Action": "string",
            "Arn": "string",
            "ExpirationTimestamp": number,
            "Id": "string",
            "Parties": [
                {
                    "Id": "string",
                    "Type": "string"
                }
            ],
            "RequestedTimestamp": number,
            "Resources": [
                {
                    "Resources": [
                        "HandshakeResource"
                    ],
                    "Type": "string",
                    "Value": "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.

Handshakes (p. 165)

A list of Handshake (p. 248) objects with details about each of the handshakes that is associated with the specified account.

Type: Array of Handshake (p. 248) objects

NextToken (p. 165)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation

to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.

- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to get a list of all handshakes that are associated with the account of the credentials that were used to call the operation.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.ListHandshakesForAccount
X-Amz-Date: 20161213T195215Z
User-Agent: aws-cli/1.11.13 Python/2.7.8 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.4.70
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 37
Date: Tue, 30 Nov 2016 19:35:02 GMT

{
  "Handshake": {
    "Action": "INVITE",
    "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
```

```
    "ExpirationTimestamp": 1482952459.257,
    "Id": "h-examplehandshakeid111",
    "Parties": [
      {
        "Id": "o-exampleorgid",
        "Type": "ORGANIZATION"
      },
      {
        "Id": "juan@example.com",
        "Type": "EMAIL"
      }
    ],
    "RequestedTimestamp": 1481656459.257,
    "Resources": [
      {
        "Resources": [
          {
            "Type": "MASTER_EMAIL",
            "Value": "diego@example.com"
          },
          {
            "Type": "MASTER_NAME",
            "Value": "Org Master Account"
          },
          {
            "Type": "ORGANIZATION_FEATURE_SET",
            "Value": "FULL"
          }
        ],
        "Type": "ORGANIZATION",
        "Value": "o-exampleorgid"
      },
      {
        "Type": "EMAIL",
        "Value": "juan@example.com"
      }
    ],
    "State": "OPEN"
  }
}
```

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

ListHandshakesForOrganization

Lists the handshakes that are associated with the organization that the requesting user is part of. The `ListHandshakesForOrganization` operation returns a list of handshake structures. Each structure contains details and status about a handshake.

Handshakes that are `ACCEPTED`, `DECLINED`, or `CANCELED` appear in the results of this API for only 30 days after changing to that state. After that, they're deleted and no longer accessible.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

```
{
   "Filter": {
      "ActionType": "string",
      "ParentHandshakeId": "string"
   },
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Filter (p. 169)

A filter of the handshakes that you want included in the response. The default is all types. Use the `ActionType` element to limit the output to only a specified type, such as `INVITE`, `ENABLE-ALL-FEATURES`, or `APPROVE-ALL-FEATURES`. Alternatively, for the `ENABLE-ALL-FEATURES` handshake that generates a separate child handshake for each member account, you can specify the `ParentHandshakeId` to see only the handshakes that were generated by that parent request.

Type: HandshakeFilter (p. 251) object

Required: No

MaxResults (p. 169)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 169)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "Handshakes": [
        {
            "Action": "string",
            "Arn": "string",
            "ExpirationTimestamp": number,
            "Id": "string",
            "Parties": [
                {
                    "Id": "string",
                    "Type": "string"
                }
            ],
            "RequestedTimestamp": number,
            "Resources": [
                {
                    "Resources": [
                        "HandshakeResource"
                    ],
                    "Type": "string",
                    "Value": "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.

Handshakes (p. 170)

A list of Handshake (p. 248) objects with details about each of the handshakes that are associated with an organization.

Type: Array of Handshake (p. 248) objects

NextToken (p. 170)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation

to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.

- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to get a list of handshakes that are associated with the current organization. The example response shows two handshakes. The first one is an invitation to Juan's account and shows a state of OPEN. The second is an invitation to Anika's account and shows a state of ACCEPTED.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.ListHandshakesForOrganization
X-Amz-Date: 20161130T203726Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 1354
Date: Mon, 30 Nov 2016 20:37:27 GMT

{
  "Handshakes": [
    {
      "Action": "INVITE",
      "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
      "ExpirationTimestamp": 1482952459.257,
      "Id": "h-examplehandshakeid111",
      "Parties": [
        {
          "Id": "o-exampleorgid",
          "Type": "ORGANIZATION"
        },
        {
          "Id": "juan@example.com",
          "Type": "EMAIL"
        }
      ],
      "RequestedTimestamp": 1481656459.257,
      "Resources": [
        {
          "Resources": [
            {
              "Type": "MASTER_EMAIL",
              "Value": "diego@example.com"
            },
            {
              "Type": "MASTER_NAME",
              "Value": "Org Master Account"
            },
            {
              "Type": "ORGANIZATION_FEATURE_SET",
              "Value": "FULL"
            }
          ],
          "Type": "ORGANIZATION",
          "Value": "o-exampleorgid"
        },
        {
          "Type": "EMAIL",
          "Value": "juan@example.com"
        },
        {
          "Type":"NOTES",
          "Value":"This is an invitation to Juan's account to join Diego's organization."
        }
      ],
      "State": "OPEN"
    },
    {
      "Action": "INVITE",
      "State":"ACCEPTED",
      "Arn": "arn:aws:organizations::111111111111:handshake/o-exampleorgid/invite/h-
examplehandshakeid111",
      "ExpirationTimestamp": 1.471797437427E9,
      "Id": "h-examplehandshakeid222",
      "Parties": [
        {
          "Id": "o-exampleorgid",
          "Type": "ORGANIZATION"
        },
        {
```

```
            "Id": "anika@example.com",
            "Type": "EMAIL"
          }
        ],
        "RequestedTimestamp": 1.469205437427E9,
        "Resources": [
          {
            "Resources": [
              {
                "Type":"MASTER_EMAIL",
                "Value":"diego@example.com"
              },
              {
                "Type":"MASTER_NAME",
                "Value":"Master Account"
              }
            ],
            "Type":"ORGANIZATION",
            "Value":"o-exampleorgid"
          },
          {
            "Type":"EMAIL",
            "Value":"anika@example.com"
          },
          {
            "Type":"NOTES",
            "Value":"This is an invitation to Anika's account to join Diego's organization."
          }
        ]
      }
    ]
}
```

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

ListOrganizationalUnitsForParent

Lists the organizational units (OUs) in a parent organizational unit or root.

Note
Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 175)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 175)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

ParentId (p. 175)

The unique identifier (ID) of the root or OU whose child OUs you want to list.

The regex pattern for a parent ID string requires one of the following:

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- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

Response Syntax

```
{
    "NextToken": "string",
    "OrganizationalUnits": [
        {
            "Arn": "string",
            "Id": "string",
            "Name": "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 (p. 176)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

OrganizationalUnits (p. 176)

A list of the OUs in the specified root or parent OU.

Type: Array of OrganizationalUnit (p. 256) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ParentNotFoundException

We can't find a root or OU with the `ParentId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to get a list of OUs in a specified root.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 105
X-Amz-Target: AWSOrganizationsV20161128.ListOrganizationalUnitsForParent
X-Amz-Date: 20160802T194924Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ParentId": "r-examplerootid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 345
Date: Tue, 02 Aug 2016 19:49:24 GMT

{
  "OrganizationalUnits": [
    {
      "Name": "AccountingDepartment",
      "Arn": "arn:aws:organizations::o-exampleorgid:ou/r-examplerootid111/ou-
examplerootid111-exampleouid111"
    },
    {
      "Name": "ProductionDepartment",
      "Arn": "arn:aws:organizations::o-exampleorgid:ou/r-examplerootid111/ou-
examplerootid111-exampleouid222"
    }
  ]
}
```

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

ListParents

Lists the root or organizational units (OUs) that serve as the immediate parent of the specified child OU or account. This operation, along with ListChildren (p. 154) enables you to traverse the tree structure that makes up this root.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

> **Note**
> In the current release, a child can have only a single parent.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

ChildId (p. 180)

The unique identifier (ID) of the OU or account whose parent containers you want to list. Don't specify a root.

The regex pattern for a child ID string requires one of the following:

- **Account** - A string that consists of exactly 12 digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

MaxResults (p. 180)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 180)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "NextToken": "string",
    "Parents": [
        {
            "Id": "string",
            "Type": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken (p. 181)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Parents (p. 181)

A list of parents for the specified child account or OU.

Type: Array of Parent (p. 258) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ChildNotFoundException

We can't find an organizational unit (OU) or AWS account with the `ChildId` that you specified.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to list the root or OUs that contain account 444444444444.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 140
X-Amz-Target: AWSOrganizationsV20161128.ListParents
X-Amz-Date: 20160802T195130Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ChildId": "444444444444" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: 81f5a675-58ea-11e6-a8d8-d5a10f646b91
Content-Type: application/x-amz-json-1.1
Content-Length: 167
Date: Tue, 02 Aug 2016 19:51:31 GMT

{
  "Parents": [
    {
      "Id": "ou-examplerootid111-exampleouid111",
      "Type": "ORGANIZATIONAL_UNIT"
    }
  ]
}
```

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

ListPolicies

Retrieves the list of all policies in an organization of a specified type.

> **Note**
> Always check the `NextToken` response parameter for a `null` value when calling a `List*`
> operation. These operations can occasionally return an empty set of results even when there are
> more results available. The `NextToken` response parameter value is `null` *only* when there are
> no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 268).

The request accepts the following data in JSON format.

Filter (p. 185)

Specifies the type of policy that you want to include in the response.

Type: String

Valid Values: `SERVICE_CONTROL_POLICY`

Required: Yes

MaxResults (p. 185)

(Optional) Use this to limit the number of results you want included per page in the response. If you
do not include this parameter, it defaults to a value that is specific to the operation. If additional
items exist beyond the maximum you specify, the `NextToken` response element is present and has
a value (is not null). Include that value as the `NextToken` request parameter in the next call to the
operation to get the next part of the results. Note that Organizations might return fewer results
than the maximum even when there are more results available. You should check `NextToken` after
every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 185)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that
there is more output available. Set it to the value of the previous call's `NextToken` response to
indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "NextToken": "string",
    "Policies": [
        {
            "Arn": "string",
            "AwsManaged": boolean,
            "Description": "string",
            "Id": "string",
            "Name": "string",
            "Type": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken (p. 186)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Policies (p. 186)

A list of policies that match the filter criteria in the request. The output list doesn't include the policy contents. To see the content for a policy, see DescribePolicy (p. 92).

Type: Array of PolicySummary (p. 260) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to get a list of service control policies (SCPs).

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 41
X-Amz-Target: AWSOrganizationsV20161128.ListPolicies
X-Amz-Date: 20160808T205104Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Filter": "SERVICE_CONTROL_POLICY" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 663
Date: Mon, 08 Aug 2016 20:51:05 GMT

{
  "Policies": [
    {
      "Type": "SERVICE_CONTROL_POLICY",
      "Name": "AllowAllS3Actions",
      "AwsManaged": false,
      "Id": "p-examplepolicyid111",
      "Arn": "arn:aws:organizations::111111111111:policy/service_control_policy/p-
examplepolicyid111",
      "Description": "Enables account admins to delegate permissions for any S3 actions to
 users and roles in their accounts."
    },
    {
      "Type": "SERVICE_CONTROL_POLICY",
      "Name": "AllowAllEC2Actions",
      "AwsManaged": false,
      "Id": "p-examplepolicyid222",
      "Arn": "arn:aws:organizations::111111111111:policy/service_control_policy/p-
examplepolicyid222",
      "Description": "Enables account admins to delegate permissions for any EC2 actions to
 users and roles in their accounts."
    },
    {
      "AwsManaged": true,
      "Description": "Allows access to every operation",
```

```
      "Type": "SERVICE_CONTROL_POLICY",
      "Id": "p-FullAWSAccess",
      "Arn": "arn:aws:organizations::aws:policy/service_control_policy/p-FullAWSAccess",
      "Name": "FullAWSAccess"
    }
  ]
}
```

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

ListPoliciesForTarget

Lists the policies that are directly attached to the specified target root, organizational unit (OU), or account. You must specify the policy type that you want included in the returned list.

Note
Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "Filter": "string",
    "MaxResults": number,
    "NextToken": "string",
    "TargetId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Filter (p. 190)

The type of policy that you want to include in the returned list.

Type: String

Valid Values: `SERVICE_CONTROL_POLICY`

Required: Yes

MaxResults (p. 190)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 190)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

TargetId (p. 190)

The unique identifier (ID) of the root, organizational unit, or account whose policies you want to list.

The regex pattern for a target ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Account** - A string that consists of exactly 12 digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

Response Syntax

```
{
    "NextToken": "string",
    "Policies": [
        {
            "Arn": "string",
            "AwsManaged": boolean,
            "Description": "string",
            "Id": "string",
            "Name": "string",
            "Type": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken (p. 191)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Policies (p. 191)

The list of policies that match the criteria in the request.

Type: Array of PolicySummary (p. 260) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor.`
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to get a list of all service control policies (SCPs) of the type specified by the `Filter` parameter, that are *directly* attached to an account. The list doesn't include policies that apply to the account because of inheritance from its location in an OU hierarchy.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 125
X-Amz-Target: AWSOrganizationsV20161128.ListPoliciesForTarget
X-Amz-Date: 20160808T220018Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160808/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "Filter": "SERVICE_CONTROL_POLICY", "TargetId": "444444444444" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 356
Date: Mon, 08 Aug 2016 22:00:19 GMT
```

```
{
  "Policies": [
    {
      "Type": "SERVICE_CONTROL_POLICY",
      "Name": "AllowAllEC2Actions",
      "AwsManaged", false,
      "Id": "p-examplepolicyid222",
      "Arn": "arn:aws:organizations::o-exampleorgid:policy/service_control_policy/p-
examplepolicyid222",
      "Description": "Enables account admins to delegate permissions for any EC2 actions to
 users and roles in their accounts."
    }
  ]
}
```

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

ListRoots

Lists the roots that are defined in the current organization.

Note
Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Note
Policy types can be enabled and disabled in roots. This is distinct from whether they're available in the organization. When you enable all features, you make policy types available for use in that organization. Individual policy types can then be enabled and disabled in a root. To see the availability of a policy type in an organization, use DescribeOrganization (p. 85).

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 195)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 195)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

Response Syntax

```
{
    "NextToken": "string",
    "Roots": [
        {
            "Arn": "string",
            "Id": "string",
            "Name": "string",
            "PolicyTypes": [
                {
                    "Status": "string",
                    "Type": "string"
                }
            ]
        }
    ]
}
```

Response Elements

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

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

NextToken (p. 196)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Roots (p. 196)

A list of roots that are defined in an organization.

Type: Array of Root (p. 265) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to get a list of roots for an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 2
X-Amz-Target: AWSOrganizationsV20161128.ListRoots
X-Amz-Date: 20160802T195347Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 161
Date: Tue, 02 Aug 2016 19:53:48 GMT

{
  "Roots": [
    {
      "Name": "Root",
      "Arn": "arn:aws:organizations::111111111111:root/o-exampleorgid/r-examplerootid111",
      "Id": "r-examplerootid111",
      "PolicyTypes": [
        {
          "Status":"ENABLED",
          "Type":"SERVICE_CONTROL_POLICY"
        }
      ]
    }
  ]
}
```

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3

- AWS SDK for Python
- AWS SDK for Ruby V2

ListTagsForResource

Lists tags for the specified resource.

Currently, you can list tags on an account in AWS Organizations.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

NextToken (p. 200)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

ResourceId (p. 200)

The ID of the resource that you want to retrieve tags for.

Type: String

Pattern: `^\d{12}$`

Required: Yes

Response Syntax

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

Response Elements

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

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

NextToken (p. 200)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Tags (p. 200)

The tags that are assigned to the resource.

Type: Array of Tag (p. 267) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.

- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to list tags for account 444444444444.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 85
X-Amz-Target: AWSOrganizationsV20161128.ListTagsForResource
X-Amz-Date: 20160802T195130Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
```

```
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ResourceId": "444444444444" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: 81f5a675-58ea-11e6-a8d8-d5a10f646b91
Content-Type: application/x-amz-json-1.1
Content-Length: 167
Date: Tue, 02 Aug 2016 19:51:31 GMT

{ "Tags": [
    {
        "Key": "Key1"
        "Value": ["value1"]
    }
  ]
}
```

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

ListTargetsForPolicy

Lists all the roots, organizational units (OUs), and accounts that the specified policy is attached to.

Note
Always check the `NextToken` response parameter for a `null` value when calling a `List*` operation. These operations can occasionally return an empty set of results even when there are more results available. The `NextToken` response parameter value is `null` *only* when there are no more results to display.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

MaxResults (p. 204)

(Optional) Use this to limit the number of results you want included per page in the response. If you do not include this parameter, it defaults to a value that is specific to the operation. If additional items exist beyond the maximum you specify, the `NextToken` response element is present and has a value (is not null). Include that value as the `NextToken` request parameter in the next call to the operation to get the next part of the results. Note that Organizations might return fewer results than the maximum even when there are more results available. You should check `NextToken` after every operation to ensure that you receive all of the results.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

NextToken (p. 204)

Use this parameter if you receive a `NextToken` response in a previous request that indicates that there is more output available. Set it to the value of the previous call's `NextToken` response to indicate where the output should continue from.

Type: String

Required: No

PolicyId (p. 204)

The unique identifier (ID) of the policy whose attachments you want to know.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: Yes

Response Syntax

```
{
    "NextToken": "string",
    "Targets": [
        {
            "Arn": "string",
            "Name": "string",
            "TargetId": "string",
            "Type": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken (p. 205)

If present, this value indicates that there is more output available than is included in the current response. Use this value in the `NextToken` request parameter in a subsequent call to the operation to get the next part of the output. You should repeat this until the `NextToken` response element comes back as `null`.

Type: String

Targets (p. 205)

A list of structures, each of which contains details about one of the entities to which the specified policy is attached.

Type: Array of PolicyTargetSummary (p. 262) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Example

The following example shows how to get the list of roots, OUs, and accounts that the specified policy is attached to.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 31
X-Amz-Target: AWSOrganizationsV20161128.ListTargetsForPolicy
X-Amz-Date: 20161216T191821Z
User-Agent: aws-cli/1.11.13 Python/2.7.8 Linux/3.2.45-0.6.wd.865.49.315.metal1.x86_64
 botocore/1.4.70
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161216/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "PolicyId": "p-FullAWSAccess" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 720
Date: Fri, 16 Dec 2016 19:18:22 GMT

{
   "Targets": [
     {
       "Arn": "arn:aws:organizations::111111111111:root/o-exampleorgid/r-examplerootid111",
       "Name": "Root",
       "TargetId":"r-examplerootid111",
       "Type":"ROOT"
     },
     {
       "Arn": "arn:aws:organizations::111111111111:account/o-exampleorgid/333333333333;",
       "Name": "Developer Test Account",
       "TargetId": "333333333333",
       "Type": "ACCOUNT"
     },
     {
       "Arn":"arn:aws:organizations::111111111111:ou/o-exampleorgid/ou-examplerootid111-
exampleouid111",
       "Name":"Accounting",
```

```
        "TargetId":"ou-examplerootid111-exampleouid111",
        "Type":"ORGANIZATIONAL_UNIT"
      }
    ]
}
```

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

MoveAccount

Moves an account from its current source parent root or organizational unit (OU) to the specified destination parent root or OU.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "AccountId": "string",
    "DestinationParentId": "string",
    "SourceParentId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

AccountId (p. 209)

The unique identifier (ID) of the account that you want to move.

The regex pattern for an account ID string requires exactly 12 digits.

Type: String

Pattern: `^\d{12}$`

Required: Yes

DestinationParentId (p. 209)

The unique identifier (ID) of the root or organizational unit that you want to move the account to.

The regex pattern for a parent ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: Yes

SourceParentId (p. 209)

The unique identifier (ID) of the root or organizational unit that you want to move the account from.

The regex pattern for a parent ID string requires one of the following:

- **Root** - A string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- **Organizational unit (OU)** - A string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

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 .

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccountNotFoundException

We can't find an AWS account with the `AccountId` that you specified, or the account whose credentials you used to make this request isn't a member of an organization.

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

DestinationParentNotFoundException

We can't find the destination container (a root or OU) with the `ParentId` that you specified.

HTTP Status Code: 400

DuplicateAccountException

That account is already present in the specified destination.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.

- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

SourceParentNotFoundException

We can't find a source root or OU with the `ParentId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to move a member account from the root to an OU.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 370
X-Amz-Target: AWSOrganizationsV20161128.MoveAccount
X-Amz-Date: 20160802T200639Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "AccountId": "333333333333", "SourceParentId": "r-examplerootid111",
 "DestinationParentId": "ou-examplerootid111-exampleouid111" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Tue, 02 Aug 2016 20:06:39 GMT
```

See Also

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

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

RemoveAccountFromOrganization

Removes the specified account from the organization.

The removed account becomes a standalone account that isn't a member of any organization. It's no longer subject to any policies and is responsible for its own bill payments. The organization's master account is no longer charged for any expenses accrued by the member account after it's removed from the organization.

This operation can be called only from the organization's master account. Member accounts can remove themselves with LeaveOrganization (p. 134) instead.

> **Important**
> You can remove an account from your organization only if the account is configured with the information required to operate as a standalone account. When you create an account in an organization using the AWS Organizations console, API, or CLI commands, the information required of standalone accounts is *not* automatically collected. For an account that you want to make standalone, you must accept the end user license agreement (EULA), choose a support plan, provide and verify the required contact information, and provide a current payment method. AWS uses the payment method to charge for any billable (not free tier) AWS activity that occurs while the account isn't attached to an organization. To remove an account that doesn't yet have this information, you must sign in as the member account and follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

Request Syntax

```
{
    "AccountId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

AccountId (p. 213)

The unique identifier (ID) of the member account that you want to remove from the organization.

The regex pattern for an account ID string requires exactly 12 digits.

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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AccountNotFoundException

We can't find an AWS account with the `AccountId` that you specified, or the account whose credentials you used to make this request isn't a member of an organization.

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

> **Note**
> Deleted and closed accounts still count toward your limit.

> **Important**
> If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.
- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.
- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.

- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

MasterCannotLeaveOrganizationException

You can't remove a master account from an organization. If you want the master account to become a member account in another organization, you must first delete the current organization of the master account.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to remove member account 333333333333 from an organization.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 85
X-Amz-Target: AWSOrganizationsV20161128.RemoveAccountFromOrganization
X-Amz-Date: 20161130T201022Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20161130/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "AccountId": "333333333333" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 0
Date: Tue, 30 Nov 2016 20:10:24 GMT
```

See Also

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

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

TagResource

Adds one or more tags to the specified resource.

Currently, you can tag and untag accounts in AWS Organizations.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common
Parameters (p. 268).

The request accepts the following data in JSON format.

ResourceId (p. 218)

The ID of the resource to add a tag to.

Type: String

Pattern: `^\d{12}$`

Required: Yes

Tags (p. 218)

The tag to add to the specified resource. Specifying the tag key is required. You can set the value of
a tag to an empty string, but you can't set the value of a tag to null.

Type: Array of Tag (p. 267) 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 (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that

corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.
- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*
- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.
- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.
- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.

- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to tag a resource with the account ID of 444444444444.

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 182
X-Amz-Target: AWSOrganizationsV20161128.TagResource
X-Amz-Date: 20160815T205727Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
Credential=AKIAIOSFODNN7EXAMPLE/20160815/us-east-1/organizations/aws4_request,
SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG
```

```
        { "ResourceId" : "444444444444", "Tags": [ {"Key": "Key1", "Value" : "value1"},
 {"Key": "Key2", "Value" : "value2"}]
        }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 172
Date: Tue, 02 Aug 2016 20:13:09 GMT
```

See Also

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

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

UntagResource

Removes a tag from the specified resource.

Currently, you can tag and untag accounts in AWS Organizations.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

ResourceId (p. 223)

> The ID of the resource to remove the tag from.
>
> Type: String
>
> Pattern: `^\d{12}$`
>
> Required: Yes

TagKeys (p. 223)

> The tag to remove from the specified resource.
>
> Type: Array of strings
>
> Length Constraints: Minimum length of 1. Maximum length of 128.
>
> Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-@]*)$`
>
> Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

> You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  Note
  Deleted and closed accounts still count toward your limit.

  Important
  If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.

- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.

- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.

- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.

- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.

- INPUT_REQUIRED: You must include a value for all required parameters.

- INVALID_ENUM: You specified an invalid value.

- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.

- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.

- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.

- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.

- INVALID_PATTERN: You provided a value that doesn't match the required pattern.

- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.

- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.

- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.

- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TargetNotFoundException

We can't find a root, OU, or account with the `TargetId` that you specified.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to remove a tag from a resource with the account ID of 444444444444.

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 182
X-Amz-Target: AWSOrganizationsV20161128.UntagResource
X-Amz-Date: 20160815T205727Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
Credential=AKIAIOSFODNN7EXAMPLE/20160815/us-east-1/organizations/aws4_request,
SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "ResourceId" : "444444444444", "TagKeys": [ {"Key": "Key1", "Key2"} ]
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 172
Date: Tue, 02 Aug 2016 20:13:09 GMT
```

See Also

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

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

UpdateOrganizationalUnit

Renames the specified organizational unit (OU). The ID and ARN don't change. The child OUs and accounts remain in place, and any attached policies of the OU remain attached.

This operation can be called only from the organization's master account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Name (p. 228)

The new name that you want to assign to the OU.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: No

OrganizationalUnitId (p. 228)

The unique identifier (ID) of the OU that you want to rename. You can get the ID from the ListOrganizationalUnitsForParent (p. 175) operation.

The regex pattern for an organizational unit ID string requires "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^ou-[0-9a-z]{4,32}-[a-z0-9]{8,32}$`

Required: Yes

Response Syntax

```
{
    "OrganizationalUnit": {
        "Arn": "string",
        "Id": "string",
        "Name": "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.

OrganizationalUnit (p. 228)

A structure that contains the details about the specified OU, including its new name.

Type: OrganizationalUnit (p. 256) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

DuplicateOrganizationalUnitException

An OU with the same name already exists.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.

- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.
- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

OrganizationalUnitNotFoundException

We can't find an OU with the `OrganizationalUnitId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

Example

The following example shows how to rename an OU. The output confirms the new name.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
```

```
Accept-Encoding: identity
Content-Length: 154
X-Amz-Target: AWSOrganizationsV20161128.UpdateOrganizationalUnit
X-Amz-Date: 20160802T201308Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160802/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "OrganizationalUnitId": "ou-examplerootid111-exampleouid111", "Name": "AccountingOU" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 172
Date: Tue, 02 Aug 2016 20:13:09 GMT

{
  "OrganizationalUnit": {
    "Id": "ou-examplerootid111-exampleouid111",
    "Name": "AccountingOU",
    "Arn": "arn:aws:organizations::111111111111:ou/o-exampleorgid/ou-examplerootid111-
exampleouid111"
  }
}
```

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

UpdatePolicy

Updates an existing policy with a new name, description, or content. If you don't supply any parameter, that value remains unchanged. You can't change a policy's type.

This operation can be called only from the organization's master account.

Request Syntax

```
{
    "Content": "string",
    "Description": "string",
    "Name": "string",
    "PolicyId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 268).

The request accepts the following data in JSON format.

Content (p. 232)

If provided, the new content for the policy. The text must be correctly formatted JSON that complies with the syntax for the policy's type. For more information, see Service Control Policy Syntax in the *AWS Organizations User Guide.*

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000000.

Required: No

Description (p. 232)

If provided, the new description for the policy.

Type: String

Length Constraints: Maximum length of 512.

Required: No

Name (p. 232)

If provided, the new name for the policy.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: No

PolicyId (p. 232)

The unique identifier (ID) of the policy that you want to update.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: Yes

Response Syntax

```
{
   "Policy": {
      "Content": "string",
      "PolicySummary": {
         "Arn": "string",
         "AwsManaged": boolean,
         "Description": "string",
         "Id": "string",
         "Name": "string",
         "Type": "string"
      }
   }
}
```

Response Elements

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

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

Policy (p. 233)

A structure that contains details about the updated policy, showing the requested changes.

Type: Policy (p. 259) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 270).

AccessDeniedException

You don't have permissions to perform the requested operation. The user or role that is making the request must have at least one IAM permissions policy attached that grants the required permissions. For more information, see Access Management in the *IAM User Guide.*

HTTP Status Code: 400

AWSOrganizationsNotInUseException

Your account isn't a member of an organization. To make this request, you must use the credentials of an account that belongs to an organization.

HTTP Status Code: 400

ConcurrentModificationException

The target of the operation is currently being modified by a different request. Try again later.

HTTP Status Code: 400

ConstraintViolationException

Performing this operation violates a minimum or maximum value limit. For example, attempting to remove the last service control policy (SCP) from an OU or root, inviting or creating too many accounts to the organization, or attaching too many policies to an account, OU, or root. This exception includes a reason that contains additional information about the violated limit.

Some of the reasons in the following list might not be applicable to this specific API or operation:

- ACCOUNT_CANNOT_LEAVE_WITHOUT_EULA: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first agree to the AWS Customer Agreement. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CANNOT_LEAVE_WITHOUT_PHONE_VERIFICATION: You attempted to remove an account from the organization that doesn't yet have enough information to exist as a standalone account. This account requires you to first complete phone verification. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- ACCOUNT_CREATION_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of accounts that you can create in one day.

- ACCOUNT_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the limit on the number of accounts in an organization. If you need more accounts, contact AWS Support to request an increase in your limit.

  Or the number of invitations that you tried to send would cause you to exceed the limit of accounts in your organization. Send fewer invitations or contact AWS Support to request an increase in the number of accounts.

  > **Note**
  > Deleted and closed accounts still count toward your limit.

  > **Important**
  > If you get receive this exception when running a command immediately after creating the organization, wait one hour and try again. If after an hour it continues to fail with this error, contact AWS Support.

- HANDSHAKE_RATE_LIMIT_EXCEEDED: You attempted to exceed the number of handshakes that you can send in one day.

- MASTER_ACCOUNT_ADDRESS_DOES_NOT_MATCH_MARKETPLACE: To create an account in this organization, you first must migrate the organization's master account to the marketplace that corresponds to the master account's address. For example, accounts with India addresses must be associated with the AISPL marketplace. All accounts in an organization must be associated with the same marketplace.

- MASTER_ACCOUNT_MISSING_CONTACT_INFO: To complete this operation, you must first provide contact a valid address and phone number for the master account. Then try the operation again.

- MASTER_ACCOUNT_NOT_GOVCLOUD_ENABLED: To complete this operation, the master account must have an associated account in the AWS GovCloud (US-West) Region. For more information, see AWS Organizations in the *AWS GovCloud User Guide.*

- MASTER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To create an organization with this master account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*

- MAX_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to exceed the number of policies of a certain type that can be attached to an entity at one time.

- MAX_TAG_LIMIT_EXCEEDED: You have exceeded the number of tags allowed on this resource.

- MEMBER_ACCOUNT_PAYMENT_INSTRUMENT_REQUIRED: To complete this operation with this member account, you first must associate a valid payment instrument, such as a credit card, with the account. Follow the steps at To leave an organization when all required account information has not yet been provided in the *AWS Organizations User Guide.*
- MIN_POLICY_TYPE_ATTACHMENT_LIMIT_EXCEEDED: You attempted to detach a policy from an entity that would cause the entity to have fewer than the minimum number of policies of a certain type required.
- OU_DEPTH_LIMIT_EXCEEDED: You attempted to create an OU tree that is too many levels deep.
- ORGANIZATION_NOT_IN_ALL_FEATURES_MODE: You attempted to perform an operation that requires the organization to be configured to support all features. An organization that supports only consolidated billing features can't perform this operation.
- OU_NUMBER_LIMIT_EXCEEDED: You attempted to exceed the number of OUs that you can have in an organization.
- POLICY_NUMBER_LIMIT_EXCEEDED. You attempted to exceed the number of policies that you can have in an organization.

HTTP Status Code: 400

DuplicatePolicyException

A policy with the same name already exists.

HTTP Status Code: 400

InvalidInputException

The requested operation failed because you provided invalid values for one or more of the request parameters. This exception includes a reason that contains additional information about the violated limit:

> **Note**
> Some of the reasons in the following list might not be applicable to this specific API or operation:

- IMMUTABLE_POLICY: You specified a policy that is managed by AWS and can't be modified.
- INPUT_REQUIRED: You must include a value for all required parameters.
- INVALID_ENUM: You specified an invalid value.
- INVALID_FULL_NAME_TARGET: You specified a full name that contains invalid characters.
- INVALID_LIST_MEMBER: You provided a list to a parameter that contains at least one invalid value.
- INVALID_PAGINATION_TOKEN: Get the value for the `NextToken` parameter from the response to a previous call of the operation.
- INVALID_PARTY_TYPE_TARGET: You specified the wrong type of entity (account, organization, or email) as a party.
- INVALID_PATTERN: You provided a value that doesn't match the required pattern.
- INVALID_PATTERN_TARGET_ID: You specified a policy target ID that doesn't match the required pattern.
- INVALID_ROLE_NAME: You provided a role name that isn't valid. A role name can't begin with the reserved prefix `AWSServiceRoleFor`.
- INVALID_SYNTAX_ORGANIZATION_ARN: You specified an invalid Amazon Resource Name (ARN) for the organization.
- INVALID_SYNTAX_POLICY_ID: You specified an invalid policy ID.
- INVALID_SYSTEM_TAGS_PARAMETER: You specified a tag key that is a system tag. You can't add, edit, or delete system tag keys because they're reserved for AWS use. System tags don't count against your tags per resource limit.
- MAX_FILTER_LIMIT_EXCEEDED: You can specify only one filter parameter for the operation.
- MAX_LENGTH_EXCEEDED: You provided a string parameter that is longer than allowed.

- MAX_VALUE_EXCEEDED: You provided a numeric parameter that has a larger value than allowed.
- MIN_LENGTH_EXCEEDED: You provided a string parameter that is shorter than allowed.
- MIN_VALUE_EXCEEDED: You provided a numeric parameter that has a smaller value than allowed.
- MOVING_ACCOUNT_BETWEEN_DIFFERENT_ROOTS: You can move an account only between entities in the same root.

HTTP Status Code: 400

MalformedPolicyDocumentException

The provided policy document doesn't meet the requirements of the specified policy type. For example, the syntax might be incorrect. For details about service control policy syntax, see Service Control Policy Syntax in the *AWS Organizations User Guide.*

HTTP Status Code: 400

PolicyNotFoundException

We can't find a policy with the `PolicyId` that you specified.

HTTP Status Code: 400

ServiceException

AWS Organizations can't complete your request because of an internal service error. Try again later.

HTTP Status Code: 400

TooManyRequestsException

You have sent too many requests in too short a period of time. The limit helps protect against denial-of-service attacks. Try again later.

For information on limits that affect AWS Organizations, see Limits of AWS Organizations in the *AWS Organizations User Guide.*

HTTP Status Code: 400

UnsupportedAPIEndpointException

This action isn't available in the current Region.

HTTP Status Code: 400

Examples

Example

The following example shows how to rename a policy and give it a new description. The output confirms the new name and description text.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 182
X-Amz-Target: AWSOrganizationsV20161128.UpdatePolicy
X-Amz-Date: 20160815T205727Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
```

```
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160815/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "PolicyId": "p-examplepolicyid111", "Name": "Renamed-Policy", "Description": "This
 description replaces the original." }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
Content-Type: application/x-amz-json-1.1
Content-Length: 394
Date: Mon, 15 Aug 2016 20:57:28 GMT

{
  "Policy": {
    "Content": "{ \"Version\": \"2012-10-17\", \"Statement\": { \"Effect\": \"Allow\",
 \"Action\": \"ec2:*\", \"Resource\": \"*\" } }",
    "PolicySummary": {
      "Id": "p-examplepolicyid111",
      "AwsManaged": false,
      "Arn":"arn:aws:organizations::111111111111:policy/o-exampleorgid/
service_control_policy/p-examplepolicyid111",
      "Description": "This description replaces the original.",
      "Name": "Renamed-Policy",
      "Type": "SERVICE_CONTROL_POLICY"
    }
  }
}
```

Example

The following example shows how to replace the JSON text of the SCP in the preceding example with a new JSON policy text string that allows S3 actions instead of EC2 actions.

Sample Request

```
POST / HTTP/1.1
Host: organizations.us-east-1.amazonaws.com
Accept-Encoding: identity
Content-Length: 254
X-Amz-Target: AWSOrganizationsV20161128.UpdatePolicy
X-Amz-Date: 20160815T210437Z
User-Agent: aws-cli/1.10.18 Python/2.7.8 Linux/2.6.18-164.el5 botocore/1.4.9
Content-Type: application/x-amz-json-1.1
Authorization: AWS4-HMAC-SHA256
  Credential=AKIAIOSFODNN7EXAMPLE/20160815/us-east-1/organizations/aws4_request,
  SignedHeaders=content-type;host;user-agent;x-amz-date;x-amz-target,
  Signature=EXAMPLESIGabcdef1234567890abcdef1234567890abcdef123456EXAMPLESIG

{ "PolicyId": "p-examplepolicyid111",
  "Content": "{ \"Version\": \"2012-10-17\", \"Statement\": {\"Effect\": \"Allow\",
 \"Action\": \"s3:*\", \"Resource\": \"*\" } }" }
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: EXAMPLE8-90ab-cdef-fedc-ba987EXAMPLE
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 336
Date: Mon, 15 Aug 2016 21:04:38 GMT

{
  "Policy": {
    "Content": "{ \"Version\": \"2012-10-17\", \"Statement\": { \"Effect\": \"Allow\",
 \"Action\": \"s3:*\", \"Resource\": \"*\" } }",
    "PolicySummary": {
      "Arn": "arn:aws:organizations::111111111111:policy/o-exampleorgid/
service_control_policy/p-examplepolicyid111",
      "AwsManaged": false;
      "Description": "This description replaces the original.",
      "Id": "p-examplepolicyid111",
      "Name": "Renamed-Policy",
      "Type": "SERVICE_CONTROL_POLICY"
    }
  }
}
```

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

Reference: API Operations by Account

This page lists all AWS Organizations API operations, grouped by which account can call them. Choose any API operation to learn more about using it.

From Master Account

These operations can be called only from the organization's master account.

- AttachPolicy
- CreateAccount
- CreateGovCloudAccount (only under specific conditions)
- CreateOrganization
- CreateOrganizationalUnit
- CreatePolicy
- DeleteOrganization
- DeleteOrganizationalUnit
- DeletePolicy
- DescribeAccount
- DescribeCreateAccountStatus
- DescribeOrganizationalUnit
- DescribePolicy
- DetachPolicy
- DisableAWSServiceAccess
- DisablePolicyType
- EnableAllFeatures
- EnableAWSServiceAccess
- EnablePolicyType
- InviteAccountToOrganization
- LeaveOrganization
- ListAccounts
- ListAccountsForParent
- ListAWSServiceAccessForOrganization
- ListChildren
- ListCreateAccountStatus
- ListHandshakesForOrganization
- ListOrganizationalUnitsForParent
- ListParents
- ListPolicies
- ListPoliciesForTarget
- ListRoots

- ListTagsForResource
- ListTargetsForPolicy
- MoveAccount
- RemoveAccountFromOrganization
- TagResource
- UntagResource
- UpdateOrganizationalUnit
- UpdatePolicy

From Any Account

These operations can be called from any account in the organization.

- DescribeHandshake
- DescribeOrganization
- ListHandshakesForAccount

From Accounts Under Specific Conditions

These operations can be called under specific conditions.

- AcceptHandshake
- CancelHandshake
- DeclineHandshake

Data Types

The AWS Organizations 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:

Account

Contains information about an AWS account that is a member of an organization.

Contents

Arn

The Amazon Resource Name (ARN) of the account.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:account\/o-[a-z0-9]{10,32}\/\d{12}`

Required: No

Email

The email address associated with the AWS account.

The regex pattern for this parameter is a string of characters that represents a standard Internet email address.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `[^\s@]+@[^\s@]+\.[^\s@]+`

Required: No

Id

The unique identifier (ID) of the account.

The regex pattern for an account ID string requires exactly 12 digits.

Type: String

Pattern: `^\d{12}$`

Required: No

JoinedMethod

The method by which the account joined the organization.

Type: String

Valid Values: `INVITED | CREATED`

Required: No

JoinedTimestamp

The date the account became a part of the organization.

Type: Timestamp

Required: No

Name

The friendly name of the account.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `[\u0020-\u007E]+`

Required: No

Status

The status of the account in the organization.

Type: String

Valid Values: `ACTIVE | SUSPENDED`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Child

Contains a list of child entities, either OUs or accounts.

Contents

Id

The unique identifier (ID) of this child entity.

The regex pattern for a child ID string requires one of the following:

- Account: a string that consists of exactly 12 digits.
- Organizational unit (OU): a string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: No

Type

The type of this child entity.

Type: String

Valid Values: `ACCOUNT | ORGANIZATIONAL_UNIT`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

CreateAccountStatus

Contains the status about a CreateAccount (p. 22) or CreateGovCloudAccount (p. 29) request to create an AWS account or an AWS GovCloud (US) account in an organization.

Contents

AccountId

If the account was created successfully, the unique identifier (ID) of the new account.

The regex pattern for an account ID string requires exactly 12 digits.

Type: String

Pattern: `^\d{12}$`

Required: No

AccountName

The account name given to the account when it was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 50.

Pattern: `[\u0020-\u007E]+`

Required: No

CompletedTimestamp

The date and time that the account was created and the request completed.

Type: Timestamp

Required: No

FailureReason

If the request failed, a description of the reason for the failure.

- ACCOUNT_LIMIT_EXCEEDED: The account could not be created because you have reached the limit on the number of accounts in your organization.
- EMAIL_ALREADY_EXISTS: The account could not be created because another AWS account with that email address already exists.
- GOVCLOUD_ACCOUNT_ALREADY_EXISTS: The account in the AWS GovCloud (US) Region could not be created because this Region already includes an account with that email address.
- INVALID_ADDRESS: The account could not be created because the address you provided is not valid.
- INVALID_EMAIL: The account could not be created because the email address you provided is not valid.
- INTERNAL_FAILURE: The account could not be created because of an internal failure. Try again later. If the problem persists, contact Customer Support.

Type: String

Valid Values: `ACCOUNT_LIMIT_EXCEEDED | EMAIL_ALREADY_EXISTS | INVALID_ADDRESS | INVALID_EMAIL | CONCURRENT_ACCOUNT_MODIFICATION | INTERNAL_FAILURE | GOVCLOUD_ACCOUNT_ALREADY_EXISTS`

Required: No

GovCloudAccountId

If the account was created successfully, the unique identifier (ID) of the new account in the AWS GovCloud (US) Region.

Type: String

Pattern: `^\d{12}$`

Required: No

Id

The unique identifier (ID) that references this request. You get this value from the response of the initial CreateAccount (p. 22) request to create the account.

The regex pattern for an create account request ID string requires "car-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^car-[a-z0-9]{8,32}$`

Required: No

RequestedTimestamp

The date and time that the request was made for the account creation.

Type: Timestamp

Required: No

State

The status of the request.

Type: String

Valid Values: `IN_PROGRESS | SUCCEEDED | FAILED`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

EnabledServicePrincipal

A structure that contains details of a service principal that is enabled to integrate with AWS Organizations.

Contents

DateEnabled

The date that the service principal was enabled for integration with AWS Organizations.

Type: Timestamp

Required: No

ServicePrincipal

The name of the service principal. This is typically in the form of a URL, such as: `servicename.amazonaws.com`.

Type: String

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

Pattern: `[\w+=,.@-]*`

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 Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

Handshake

Contains information that must be exchanged to securely establish a relationship between two accounts (an *originator* and a *recipient*). For example, when a master account (the originator) invites another account (the recipient) to join its organization, the two accounts exchange information as a series of handshake requests and responses.

Note: Handshakes that are CANCELED, ACCEPTED, or DECLINED show up in lists for only 30 days after entering that state After that they are deleted.

Contents

Action

The type of handshake, indicating what action occurs when the recipient accepts the handshake. The following handshake types are supported:

- **INVITE**: This type of handshake represents a request to join an organization. It is always sent from the master account to only non-member accounts.

- **ENABLE_ALL_FEATURES**: This type of handshake represents a request to enable all features in an organization. It is always sent from the master account to only *invited* member accounts. Created accounts do not receive this because those accounts were created by the organization's master account and approval is inferred.

- **APPROVE_ALL_FEATURES**: This type of handshake is sent from the Organizations service when all member accounts have approved the `ENABLE_ALL_FEATURES` invitation. It is sent only to the master account and signals the master that it can finalize the process to enable all features.

Type: String

Valid Values: `INVITE | ENABLE_ALL_FEATURES | APPROVE_ALL_FEATURES | ADD_ORGANIZATIONS_SERVICE_LINKED_ROLE`

Required: No

Arn

The Amazon Resource Name (ARN) of a handshake.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:handshake\/o-[a-z0-9]{10,32}\/[a-z_]{1,32}\/h-[0-9a-z]{8,32}`

Required: No

ExpirationTimestamp

The date and time that the handshake expires. If the recipient of the handshake request fails to respond before the specified date and time, the handshake becomes inactive and is no longer valid.

Type: Timestamp

Required: No

Id

The unique identifier (ID) of a handshake. The originating account creates the ID when it initiates the handshake.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: No

Parties

Information about the two accounts that are participating in the handshake.

Type: Array of HandshakeParty (p. 252) objects

Required: No

RequestedTimestamp

The date and time that the handshake request was made.

Type: Timestamp

Required: No

Resources

Additional information that is needed to process the handshake.

Type: Array of HandshakeResource (p. 253) objects

Required: No

State

The current state of the handshake. Use the state to trace the flow of the handshake through the process from its creation to its acceptance. The meaning of each of the valid values is as follows:

- **REQUESTED**: This handshake was sent to multiple recipients (applicable to only some handshake types) and not all recipients have responded yet. The request stays in this state until all recipients respond.
- **OPEN**: This handshake was sent to multiple recipients (applicable to only some policy types) and all recipients have responded, allowing the originator to complete the handshake action.
- **CANCELED**: This handshake is no longer active because it was canceled by the originating account.
- **ACCEPTED**: This handshake is complete because it has been accepted by the recipient.
- **DECLINED**: This handshake is no longer active because it was declined by the recipient account.
- **EXPIRED**: This handshake is no longer active because the originator did not receive a response of any kind from the recipient before the expiration time (15 days).

Type: String

Valid Values: `REQUESTED | OPEN | CANCELED | ACCEPTED | DECLINED | EXPIRED`

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 Go

- AWS SDK for Java
- AWS SDK for Ruby V2

HandshakeFilter

Specifies the criteria that are used to select the handshakes for the operation.

Contents

ActionType

Specifies the type of handshake action.

If you specify `ActionType`, you cannot also specify `ParentHandshakeId`.

Type: String

Valid Values: `INVITE` | `ENABLE_ALL_FEATURES` | `APPROVE_ALL_FEATURES` | `ADD_ORGANIZATIONS_SERVICE_LINKED_ROLE`

Required: No

ParentHandshakeId

Specifies the parent handshake. Only used for handshake types that are a child of another type.

If you specify `ParentHandshakeId`, you cannot also specify `ActionType`.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

Pattern: `^h-[0-9a-z]{8,32}$`

Required: No

See Also

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

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

HandshakeParty

Identifies a participant in a handshake.

Contents

Id

The unique identifier (ID) for the party.

The regex pattern for handshake ID string requires "h-" followed by from 8 to 32 lower-case letters or digits.

Type: String

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

Required: Yes

Type

The type of party.

Type: String

Valid Values: `ACCOUNT | ORGANIZATION | EMAIL`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

HandshakeResource

Contains additional data that is needed to process a handshake.

Contents

Resources

When needed, contains an additional array of `HandshakeResource` objects.

Type: Array of HandshakeResource (p. 253) objects

Required: No

Type

The type of information being passed, specifying how the value is to be interpreted by the other party:

- `ACCOUNT` - Specifies an AWS account ID number.
- `ORGANIZATION` - Specifies an organization ID number.
- `EMAIL` - Specifies the email address that is associated with the account that receives the handshake.
- `OWNER_EMAIL` - Specifies the email address associated with the master account. Included as information about an organization.
- `OWNER_NAME` - Specifies the name associated with the master account. Included as information about an organization.
- `NOTES` - Additional text provided by the handshake initiator and intended for the recipient to read.

Type: String

Valid Values: `ACCOUNT` | `ORGANIZATION` | `ORGANIZATION_FEATURE_SET` | `EMAIL` | `MASTER_EMAIL` | `MASTER_NAME` | `NOTES` | `PARENT_HANDSHAKE`

Required: No

Value

The information that is passed to the other party in the handshake. The format of the value string must match the requirements of the specified type.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Organization

Contains details about an organization. An organization is a collection of accounts that are centrally managed together using consolidated billing, organized hierarchically with organizational units (OUs), and controlled with policies .

Contents

Arn

The Amazon Resource Name (ARN) of an organization.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:organization\/o-[a-z0-9]{10,32}`

Required: No

AvailablePolicyTypes

A list of policy types that are enabled for this organization. For example, if your organization has all features enabled, then service control policies (SCPs) are included in the list.

> **Note**
> Even if a policy type is shown as available in the organization, you can separately enable and disable them at the root level by using EnablePolicyType (p. 122) and DisablePolicyType (p. 106). Use ListRoots (p. 195) to see the status of a policy type in that root.

Type: Array of PolicyTypeSummary (p. 264) objects

Required: No

FeatureSet

Specifies the functionality that currently is available to the organization. If set to "ALL", then all features are enabled and policies can be applied to accounts in the organization. If set to "CONSOLIDATED_BILLING", then only consolidated billing functionality is available. For more information, see Enabling All Features in Your Organization in the *AWS Organizations User Guide*.

Type: String

Valid Values: `ALL | CONSOLIDATED_BILLING`

Required: No

Id

The unique identifier (ID) of an organization.

The regex pattern for an organization ID string requires "o-" followed by from 10 to 32 lower-case letters or digits.

Type: String

Pattern: `^o-[a-z0-9]{10,32}$`

Required: No

MasterAccountArn

The Amazon Resource Name (ARN) of the account that is designated as the master account for the organization.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:account\/o-[a-z0-9]{10,32}\/\d{12}`

Required: No

MasterAccountEmail

The email address that is associated with the AWS account that is designated as the master account for the organization.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `[^\s@]+@[^\s@]+\.[^\s@]+`

Required: No

MasterAccountId

The unique identifier (ID) of the master account of an organization.

The regex pattern for an account ID string requires exactly 12 digits.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

OrganizationalUnit

Contains details about an organizational unit (OU). An OU is a container of AWS accounts within a root of an organization. Policies that are attached to an OU apply to all accounts contained in that OU and in any child OUs.

Contents

Arn

The Amazon Resource Name (ARN) of this OU.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:ou\/o-[a-z0-9]{10,32}\/ou-[0-9a-z]{4,32}-[0-9a-z]{8,32}`

Required: No

Id

The unique identifier (ID) associated with this OU.

The regex pattern for an organizational unit ID string requires "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that contains the OU) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^ou-[0-9a-z]{4,32}-[a-z0-9]{8,32}$`

Required: No

Name

The friendly name of this OU.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Parent

Contains information about either a root or an organizational unit (OU) that can contain OUs or accounts in an organization.

Contents

Id

The unique identifier (ID) of the parent entity.

The regex pattern for a parent ID string requires one of the following:

- Root: a string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- Organizational unit (OU): a string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: No

Type

The type of the parent entity.

Type: String

Valid Values: `ROOT | ORGANIZATIONAL_UNIT`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Policy

Contains rules to be applied to the affected accounts. Policies can be attached directly to accounts, or to roots and OUs to affect all accounts in those hierarchies.

Contents

Content

The text content of the policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000000.

Required: No

PolicySummary

A structure that contains additional details about the policy.

Type: PolicySummary (p. 260) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

PolicySummary

Contains information about a policy, but does not include the content. To see the content of a policy, see DescribePolicy (p. 92).

Contents

Arn

The Amazon Resource Name (ARN) of the policy.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^(arn:aws:organizations::\d{12}:policy\/o-[a-z0-9]{10,32}\/[0-9a-z_]+\/p-[0-9a-z]{10,32})|(arn:aws:organizations::aws:policy\/[0-9a-z_]+\/p-[0-9a-zA-Z_]{10,128})`

Required: No

AwsManaged

A boolean value that indicates whether the specified policy is an AWS managed policy. If true, then you can attach the policy to roots, OUs, or accounts, but you cannot edit it.

Type: Boolean

Required: No

Description

The description of the policy.

Type: String

Length Constraints: Maximum length of 512.

Required: No

Id

The unique identifier (ID) of the policy.

The regex pattern for a policy ID string requires "p-" followed by from 8 to 128 lower-case letters or digits.

Type: String

Pattern: `^p-[0-9a-zA-Z_]{8,128}$`

Required: No

Name

The friendly name of the policy.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: No

Type

The type of policy.

Type: String

Valid Values: `SERVICE_CONTROL_POLICY`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

PolicyTargetSummary

Contains information about a root, OU, or account that a policy is attached to.

Contents

Arn

The Amazon Resource Name (ARN) of the policy target.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::.+:.+`

Required: No

Name

The friendly name of the policy target.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: No

TargetId

The unique identifier (ID) of the policy target.

The regex pattern for a target ID string requires one of the following:

- Root: a string that begins with "r-" followed by from 4 to 32 lower-case letters or digits.
- Account: a string that consists of exactly 12 digits.
- Organizational unit (OU): a string that begins with "ou-" followed by from 4 to 32 lower-case letters or digits (the ID of the root that the OU is in) followed by a second "-" dash and from 8 to 32 additional lower-case letters or digits.

Type: String

Pattern: `^(r-[0-9a-z]{4,32})|(\d{12})|(ou-[0-9a-z]{4,32}-[a-z0-9]{8,32})$`

Required: No

Type

The type of the policy target.

Type: String

Valid Values: `ACCOUNT | ORGANIZATIONAL_UNIT | ROOT`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

PolicyTypeSummary

Contains information about a policy type and its status in the associated root.

Contents

Status

The status of the policy type as it relates to the associated root. To attach a policy of the specified type to a root or to an OU or account in that root, it must be available in the organization and enabled for that root.

Type: String

Valid Values: `ENABLED | PENDING_ENABLE | PENDING_DISABLE`

Required: No

Type

The name of the policy type.

Type: String

Valid Values: `SERVICE_CONTROL_POLICY`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Root

Contains details about a root. A root is a top-level parent node in the hierarchy of an organization that can contain organizational units (OUs) and accounts. Every root contains every AWS account in the organization. Each root enables the accounts to be organized in a different way and to have different policy types enabled for use in that root.

Contents

Arn

The Amazon Resource Name (ARN) of the root.

For more information about ARNs in Organizations, see ARN Formats Supported by Organizations in the *AWS Organizations User Guide*.

Type: String

Pattern: `^arn:aws:organizations::\d{12}:root\/o-[a-z0-9]{10,32}\/r-[0-9a-z]{4,32}`

Required: No

Id

The unique identifier (ID) for the root.

The regex pattern for a root ID string requires "r-" followed by from 4 to 32 lower-case letters or digits.

Type: String

Pattern: `^r-[0-9a-z]{4,32}$`

Required: No

Name

The friendly name of the root.

The regex pattern that is used to validate this parameter is a string of any of the characters in the ASCII character range.

Type: String

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

Required: No

PolicyTypes

The types of policies that are currently enabled for the root and therefore can be attached to the root or to its OUs or accounts.

> **Note**
> Even if a policy type is shown as available in the organization, you can separately enable and disable them at the root level by using EnablePolicyType (p. 122) and DisablePolicyType (p. 106). Use DescribeOrganization (p. 85) to see the availability of the policy types in that organization.

Type: Array of PolicyTypeSummary (p. 264) 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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2

Tag

A custom key-value pair associated with a resource such as an account within your organization.

Contents

Key

The key identifier, or name, of the tag.

Type: String

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

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-@]*)$`

Required: Yes

Value

The string value that's associated with the key of the tag. You can set the value of a tag to an empty string, but you can't set the value of a tag to null.

Type: String

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

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-@]*)$`

Required: Yes

See Also

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

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

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see Signature Version 4 Signing Process in the *Amazon Web Services General Reference*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.

For more information, see Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the *Amazon Web Services General Reference*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 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

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

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