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# Amazon Cognito Federated Identities

## API Reference

### API Version 2014-06-30



## **Amazon Cognito Federated Identities: API Reference**

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# Welcome

Amazon Cognito Federated Identities is a web service that delivers scoped temporary credentials to mobile devices and other untrusted environments. It uniquely identifies a device and supplies the user with a consistent identity over the lifetime of an application.

Using Amazon Cognito Federated Identities, you can enable authentication with one or more third-party identity providers (Facebook, Google, or Login with Amazon) or an Amazon Cognito user pool, and you can also choose to support unauthenticated access from your app. Cognito delivers a unique identifier for each user and acts as an OpenID token provider trusted by AWS Security Token Service (STS) to access temporary, limited-privilege AWS credentials.

For a description of the authentication flow from the Amazon Cognito Developer Guide see [Authentication Flow](#).

For more information see [Amazon Cognito Federated Identities](#).

This document was last published on June 21, 2018.

# Actions

The following actions are supported:

- [CreateIdentityPool](#) (p. 3)
- [DeleteIdentities](#) (p. 9)
- [DeleteIdentityPool](#) (p. 11)
- [DescribeIdentity](#) (p. 13)
- [DescribeIdentityPool](#) (p. 16)
- [GetCredentialsForIdentity](#) (p. 20)
- [GetId](#) (p. 24)
- [GetIdentityPoolRoles](#) (p. 28)
- [GetOpenIdToken](#) (p. 31)
- [GetOpenIdTokenForDeveloperIdentity](#) (p. 35)
- [ListIdentities](#) (p. 39)
- [ListIdentityPools](#) (p. 43)
- [LookupDeveloperIdentity](#) (p. 46)
- [MergeDeveloperIdentities](#) (p. 50)
- [SetIdentityPoolRoles](#) (p. 53)
- [UnlinkDeveloperIdentity](#) (p. 56)
- [UnlinkIdentity](#) (p. 59)
- [UpdateIdentityPool](#) (p. 62)

# CreatIdentityPool

Creates a new identity pool. The identity pool is a store of user identity information that is specific to your AWS account. The limit on identity pools is 60 per account. The keys for `SupportedLoginProviders` are as follows:

- Facebook: `graph.facebook.com`
- Google: `accounts.google.com`
- Amazon: `www.amazon.com`
- Twitter: `api.twitter.com`
- Digits: `www.digits.com`

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{
  "AllowUnauthenticatedIdentities": boolean,
  "CognitoIdentityProviders": [
    {
      "ClientId": "string",
      "ProviderName": "string",
      "ServerSideTokenCheck": boolean
    }
  ],
  "DeveloperProviderName": "string",
  "IdentityPoolName": "string",
  "OpenIdConnectProviderARNs": [ "string" ],
  "SamlProviderARNs": [ "string" ],
  "SupportedLoginProviders": {
    "string" : "string"
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### **AllowUnauthenticatedIdentities (p. 3)**

TRUE if the identity pool supports unauthenticated logins.

Type: Boolean

Required: Yes

### **CognitoIdentityProviders (p. 3)**

An array of Amazon Cognito user pools and their client IDs.

Type: Array of [CognitoIdentityProvider \(p. 69\)](#) objects

Required: No



### **DeveloperProviderName (p. 3)**

The "domain" by which Cognito will refer to your users. This name acts as a placeholder that allows your backend and the Cognito service to communicate about the developer provider. For the `DeveloperProviderName`, you can use letters as well as period (.), underscore (\_), and dash (-).

Once you have set a developer provider name, you cannot change it. Please take care in setting this parameter.

Type: String

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

Pattern: `[\w._- ]+`

Required: No

### **IdentityPoolName (p. 3)**

A string that you provide.

Type: String

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

Pattern: `[\w ]+`

Required: Yes

### **OpenIdConnectProviderARNs (p. 3)**

A list of OpenID Connect provider ARNs.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### **SamlProviderARNs (p. 3)**

An array of Amazon Resource Names (ARNs) of the SAML provider for your identity pool.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### **SupportedLoginProviders (p. 3)**

Optional key:value pairs mapping provider names to provider app IDs.

Type: String to string map

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

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

Value Pattern: `[\w.;_/- ]+`

Required: No

## Response Syntax

```
{
  "AllowUnauthenticatedIdentities": boolean,
  "CognitoIdentityProviders": [
    {
      "ClientId": "string",
      "ProviderName": "string",
      "ServerSideTokenCheck": boolean
    }
  ],
  "DeveloperProviderName": "string",
  "IdentityPoolId": "string",
  "IdentityPoolName": "string",
  "OpenIdConnectProviderARNs": [ "string" ],
  "SamlProviderARNs": [ "string" ],
  "SupportedLoginProviders": {
    "string" : "string"
  }
}
```

## Response Elements

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

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

### **AllowUnauthenticatedIdentities** (p. 5)

TRUE if the identity pool supports unauthenticated logins.

Type: Boolean

### **CognitoIdentityProviders** (p. 5)

A list representing an Amazon Cognito user pool and its client ID.

Type: Array of [CognitoIdentityProvider](#) (p. 69) objects

### **DeveloperProviderName** (p. 5)

The "domain" by which Cognito will refer to your users.

Type: String

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

Pattern: [\w. \_- ]+

### **IdentityPoolId** (p. 5)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

### **IdentityPoolName** (p. 5)

A string that you provide.

Type: String

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

Pattern: [ \w ]+

#### **OpenIdConnectProviderARNs (p. 5)**

A list of OpenID Connect provider ARNs.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

#### **SamlProviderARNs (p. 5)**

An array of Amazon Resource Names (ARNs) of the SAML provider for your identity pool.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

#### **SupportedLoginProviders (p. 5)**

Optional key:value pairs mapping provider names to provider app IDs.

Type: String to string map

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

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

Value Pattern: [ \w . ; \_ / - ]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **LimitExceededException**

Thrown when the total number of user pools has exceeded a preset limit.

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### TooManyRequestsException

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### CreateIdentityPool

The following examples show a request and response for `CreateIdentityPool`. The request and response bodies have been edited for readability and may not match the stated `Content-Length` values. Note: For the key "api.twitter.com" and "www.digits.com" the value to be set in the dictionary is a concatenation of the consumer key and consumer secret strings separated by a semicolon.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 369
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.CreateIdentityPool
HOST: <endpoint>
X-AMZ-DATE: 20140804T205551Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-
type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>

{
  "IdentityPoolName": "MyIdentityPool",
  "AllowUnauthenticatedIdentities": true,
  "SupportedLoginProviders":
  {
    "graph.facebook.com": "7346241598935555",
    "accounts.google.com": "123456789012.apps.googleusercontent.com",
    "www.amazon.com": "amzn1.application-oa2-client.188a56d827a7d6555a8b67a5d",
    "api.twitter.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw",
    "www.digits.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw"
  }
}
```

#### Sample Response

```
1.1 200 OK
x-amzn-requestid: 15cc73a1-0780-460c-91e8-e12ef034e116
date: Mon, 04 Aug 2014 20:55:52 GMT
content-type: application/json
content-length: 1091

{
  "AllowUnauthenticatedIdentities": true,
  "IdentityPoolId": "us-east-1:1cf667a2-49a6-454b-9e45-23199EXAMPLE",
  "IdentityPoolName": "MyIdentityPool",
  "SupportedLoginProviders":
```

```
{
  "accounts.google.com": "123456789012.apps.googleusercontent.com",
  "graph.facebook.com": "7346241598935555",
  "www.amazon.com": "amzn1.application-oa2-client.188a56d827a7d6555a8b67a5d",
  "api.twitter.com":
"xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw",
  "www.digits.com":
"xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw"
}
```

## 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](#)

## DeletIdentities

Deletes identities from an identity pool. You can specify a list of 1-60 identities that you want to delete.

You must use AWS Developer credentials to call this API.

### Request Syntax

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

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### **IdentityIdsToDelete (p. 9)**

A list of 1-60 identities that you want to delete.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 60 items.

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

Required: Yes

### Response Syntax

```
{
  "UnprocessedIdentityIds": [
    {
      "ErrorCode": "string",
      "IdentityId": "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.

#### **UnprocessedIdentityIds (p. 9)**

An array of UnprocessedIdentityId objects, each of which contains an ErrorCode and IdentityId.

Type: Array of [UnprocessedIdentityId \(p. 76\)](#) objects

Array Members: Maximum number of 60 items.

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

## DeleteIdentityPool

Deletes an identity pool. Once a pool is deleted, users will not be able to authenticate with the pool.

You must use AWS Developer credentials to call this API.

### Request Syntax

```
{  
  "IdentityPoolId": "string"  
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### **IdentityPoolId (p. 11)**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

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 \(p. 79\)](#).

#### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

#### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400



### ResourceNotFoundException

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### TooManyRequestsException

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### DeleteIdentityPool

The following is an example of a `DeleteIdentityPool` request. The request body has been formatted for readability and may not match the `content-length` value.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 222
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSIdentityService.DeleteIdentityPool
HOST: <endpoint>
X-AMZ-DATE: 20140804T214319Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-
type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>

{
  "IdentityPoolId": "us-east-1:177a950c-2c08-43f0-9983-28727EXAMPLE"
}
```

## 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](#)

## DescribeIdentity

Returns metadata related to the given identity, including when the identity was created and any associated linked logins.

You must use AWS Developer credentials to call this API.

### Request Syntax

```
{  
  "IdentityId": "string"  
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### IdentityId (p. 13)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

Required: Yes

### Response Syntax

```
{  
  "CreationDate": number,  
  "IdentityId": "string",  
  "LastModifiedDate": number,  
  "Logins": [ "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.

#### CreationDate (p. 13)

Date on which the identity was created.

Type: Timestamp

#### IdentityId (p. 13)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

#### **LastModifiedDate (p. 13)**

Date on which the identity was last modified.

Type: Timestamp

#### **Logins (p. 13)**

The provider names.

Type: Array of strings

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

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

#### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

#### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

#### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

#### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

## DescribeIdentityPool

Gets details about a particular identity pool, including the pool name, ID description, creation date, and current number of users.

You must use AWS Developer credentials to call this API.

### Request Syntax

```
{
  "IdentityPoolId": "string"
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### IdentityPoolId (p. 16)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+:[0-9a-f-]+

Required: Yes

### Response Syntax

```
{
  "AllowUnauthenticatedIdentities": boolean,
  "CognitoIdentityProviders": [
    {
      "ClientId": "string",
      "ProviderName": "string",
      "ServerSideTokenCheck": boolean
    }
  ],
  "DeveloperProviderName": "string",
  "IdentityPoolId": "string",
  "IdentityPoolName": "string",
  "OpenIdConnectProviderARNs": [ "string" ],
  "SamlProviderARNs": [ "string" ],
  "SupportedLoginProviders": {
    "string" : "string"
  }
}
```

### Response Elements

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

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

**AllowUnauthenticatedIdentities (p. 16)**

TRUE if the identity pool supports unauthenticated logins.

Type: Boolean

**CognitoIdentityProviders (p. 16)**

A list representing an Amazon Cognito user pool and its client ID.

Type: Array of [CognitoIdentityProvider \(p. 69\)](#) objects

**DeveloperProviderName (p. 16)**

The "domain" by which Cognito will refer to your users.

Type: String

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

Pattern: [\w.\_- ]+

**IdentityPoolId (p. 16)**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

**IdentityPoolName (p. 16)**

A string that you provide.

Type: String

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

Pattern: [\w ]+

**OpenIdConnectProviderARNs (p. 16)**

A list of OpenID Connect provider ARNs.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

**SamlProviderARNs (p. 16)**

An array of Amazon Resource Names (ARNs) of the SAML provider for your identity pool.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

**SupportedLoginProviders (p. 16)**

Optional key:value pairs mapping provider names to provider app IDs.

Type: String to string map

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

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

Value Pattern: [`\w. ;_/-` ]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### DescribeIdentityPool

The following examples show a request and response for the `DescribeIdentityPool` operation. The request and response bodies have been edited for readability and may not match the stated `content-length` values.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 224
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSIdentityService.DescribeIdentityPool
HOST: <endpoint>
X-AMZ-DATE: 20140804T203833Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-
type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>
{
```

```
"IdentityPoolId": "us-east-1:177a950c-2c08-43f0-9983-28727EXAMPLE"  
}
```

## Sample Response

```
1.1 200 OK  
x-amzn-requestid: c5cc0ad5-c604-455a-87ee-cb830b22341a  
date: Mon, 04 Aug 2014 20:38:33 GMT  
content-type: application/json  
content-length: 367  
  
{  
  "AllowUnauthenticatedIdentities": true,  
  "IdentityPoolId": "us-east-1:177a950c-2c08-43f0-9983-28727EXAMPLE",  
  "IdentityPoolName": "MyIdentityPool",  
  "SupportedLoginProviders":  
  {  
    "accounts.google.com": "123456789012.apps.googleusercontent.com",  
    "graph.facebook.com": "7346241598935555",  
    "www.amazon.com": "amzn1.application-oa2-client.188a56d827a7d6555a8b67a5d"  
  }  
}
```

## 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](#)



# GetCredentialsForIdentity

Returns credentials for the provided identity ID. Any provided logins will be validated against supported login providers. If the token is for `cognito-identity.amazonaws.com`, it will be passed through to AWS Security Token Service with the appropriate role for the token.

This is a public API. You do not need any credentials to call this API.

## Request Syntax

```
{
  "CustomRoleArn": "string",
  "IdentityId": "string",
  "Logins": {
    "string" : "string"
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### CustomRoleArn (p. 20)

The Amazon Resource Name (ARN) of the role to be assumed when multiple roles were received in the token from the identity provider. For example, a SAML-based identity provider. This parameter is optional for identity providers that do not support role customization.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### IdentityId (p. 20)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

Required: Yes

### Logins (p. 20)

A set of optional name-value pairs that map provider names to provider tokens. The name-value pair will follow the syntax `"provider_name": "provider_user_identifier"`.

Logins should not be specified when trying to get credentials for an unauthenticated identity.

The Logins parameter is required when using identities associated with external identity providers such as Facebook. For examples of Logins maps, see the code examples in the [External Identity Providers](#) section of the Amazon Cognito Developer Guide.

Type: String to string map

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

Value Length Constraints: Minimum length of 1. Maximum length of 50000.

Required: No

## Response Syntax

```
{
  "Credentials": {
    "AccessKeyId": "string",
    "Expiration": number,
    "SecretKey": "string",
    "SessionToken": "string"
  },
  "IdentityId": "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.

### Credentials (p. 21)

Credentials for the provided identity ID.

Type: [Credentials \(p. 70\)](#) object

### IdentityId (p. 21)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### ExternalServiceException

An exception thrown when a dependent service such as Facebook or Twitter is not responding

HTTP Status Code: 400

### InternalErrorException

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidIdentityPoolConfigurationException**

Thrown if the identity pool has no role associated for the given auth type (auth/unauth) or if the AssumeRole fails.

HTTP Status Code: 400

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### GetCredentialsForIdentity

The following example shows a `GetCredentialsForIdentity` request.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/x-amz-json-1.1
CONTENT-LENGTH: 250
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.GetCredentialsForIdentity
HOST: <endpoint>
X-AMZ-DATE: 20151020T232759Z

{
  "IdentityId": "us-east-1:88b5cc2c-c8c4-4932-a4e5-fc85EXAMPLE"
}
```

#### Sample Response

```
1.1 200 OK
content-length: 1168,
content-type: application/x-amz-json-1.1,
date: Mon, 21 Sep 2015 22:38:52 GMT,
x-amzn-requestid: 8906cbc7-60b1-11e5-9f63-1bfexample,

{
  "Credentials":{
    "SecretKey":"2gZ8QJQqkAHBzebQmghavFAfgmYpKWRqexample",
    "SessionToken":"AQoDYXdzEMf////////wEasAWDYyZbsv2CTPExzidYyEXAMPLE",
    "Expiration":1442877512.0,
    "AccessKeyId":"ASIAJIOA37R6EXAMPLE"
  },
  "IdentityId":"us-east-1:88b5cc2c-c8c4-4932-a4e5-fc85EXAMPLE"
}
```

## 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](#)

## GetId

Generates (or retrieves) a Cognito ID. Supplying multiple logins will create an implicit linked account.

This is a public API. You do not need any credentials to call this API.

### Request Syntax

```
{
  "AccountId": "string",
  "IdentityPoolId": "string",
  "Logins": {
    "string" : "string"
  }
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### AccountId (p. 24)

A standard AWS account ID (9+ digits).

Type: String

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

Pattern: \d+

Required: No

#### IdentityPoolId (p. 24)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

Required: Yes

#### Logins (p. 24)

A set of optional name-value pairs that map provider names to provider tokens. The available provider names for Logins are as follows:

- Facebook: `graph.facebook.com`
- Amazon Cognito user pool: `cognito-idp.<region>.amazonaws.com/<YOUR_USER_POOL_ID>`, for example, `cognito-idp.us-east-1.amazonaws.com/us-east-1_123456789`.
- Google: `accounts.google.com`
- Amazon: `www.amazon.com`

- Twitter: `api.twitter.com`
- Digits: `www.digits.com`

Type: String to string map

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

Value Length Constraints: Minimum length of 1. Maximum length of 50000.

Required: No

## Response Syntax

```
{  
  "IdentityId": "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.

### IdentityId (p. 25)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w- ]+ : [0-9a-f- ]+`

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### ExternalServiceException

An exception thrown when a dependent service such as Facebook or Twitter is not responding

HTTP Status Code: 400

### InternalErrorException

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### InvalidParameterException

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### LimitExceededException

Thrown when the total number of user pools has exceeded a preset limit.

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

#### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

#### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

#### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### GetId

The following example shows a `GetId` request for an unauthenticated identity. The request body has been edited for readability and may not match the stated `content-length`.

### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/x-amz-json-1.1
CONTENT-LENGTH: 252
X-AMZ-TARGET: com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.GetId
HOST: <endpoint>
X-AMZ-DATE: 20140730T232759Z
{
  "AccountId": "123456789012",
  "IdentityPoolId": "us-east-1:177a950c-2c08-43f0-9983-28727EXAMPLE"
}
```

### Sample Response

```
1.1 200 OK
x-amzn-requestid: ff1ca798-b930-4b81-9ef3-c02e770188af
date: Mon, 04 Aug 2014 22:03:36 GMT
CONTENT-TYPE: application/x-amz-json-1.1
content-length: 152
{
  "IdentityId": "us-east-1:88859bc9-0149-4183-bf10-39e36EXAMPLE"
}
```

## 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](#)



# GetIdentityPoolRoles

Gets the roles for an identity pool.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{  
  "IdentityPoolId": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### IdentityPoolId (p. 28)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+:[0-9a-f- ]+

Required: Yes

## Response Syntax

```
{  
  "IdentityPoolId": "string",  
  "RoleMappings": {  
    "string": {  
      "AmbiguousRoleResolution": "string",  
      "RulesConfiguration": {  
        "Rules": [  
          {  
            "Claim": "string",  
            "MatchType": "string",  
            "RoleARN": "string",  
            "Value": "string"  
          }  
        ]  
      }  
    },  
    "Type": "string"  
  }  
},  
  "Roles": {  
    "string": "string"  
  }  
}
```

## Response Elements

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

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

### **IdentityPoolId** (p. 28)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

### **RoleMappings** (p. 28)

How users for a specific identity provider are to mapped to roles. This is a String-to-[RoleMapping](#) (p. 74) object map. The string identifies the identity provider, for example, "graph.facebook.com" or "cognito-idp-east-1.amazonaws.com/us-east-1\_abcdefghi:app\_client\_id".

Type: String to [RoleMapping](#) (p. 74) object map

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

### **Roles** (p. 28)

The map of roles associated with this pool. Currently only authenticated and unauthenticated roles are supported.

Type: String to string map

Key Pattern: (un)?authenticated

Value Length Constraints: Minimum length of 20. Maximum length of 2048.

## Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 79).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

**ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

**TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

## GetOpenIdToken

Gets an OpenID token, using a known Cognito ID. This known Cognito ID is returned by [GetId \(p. 24\)](#). You can optionally add additional logins for the identity. Supplying multiple logins creates an implicit link.

The OpenId token is valid for 10 minutes.

This is a public API. You do not need any credentials to call this API.

### Request Syntax

```
{
  "IdentityId": "string",
  "Logins": {
    "string" : "string"
  }
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### IdentityId (p. 31)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+ : [0-9a-f- ]+

Required: Yes

#### Logins (p. 31)

A set of optional name-value pairs that map provider names to provider tokens. When using graph.facebook.com and www.amazon.com, supply the access\_token returned from the provider's authflow. For accounts.google.com, an Amazon Cognito user pool provider, or any other OpenId Connect provider, always include the id\_token.

Type: String to string map

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

Value Length Constraints: Minimum length of 1. Maximum length of 50000.

Required: No

### Response Syntax

```
{
  "IdentityId": "string",
```

```
"Token": "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.

### IdentityId (p. 31)

A unique identifier in the format REGION:GUID. Note that the IdentityId returned may not match the one passed on input.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+ : [0-9a-f- ]+

### Token (p. 31)

An OpenID token, valid for 10 minutes.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### ExternalServiceException

An exception thrown when a dependent service such as Facebook or Twitter is not responding

HTTP Status Code: 400

### InternalErrorException

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### InvalidParameterException

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### NotAuthorizedException

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### ResourceConflictException

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### ResourceNotFoundException

Thrown when the requested resource (for example, a dataset or record) does not exist.



- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# GetOpenIdTokenForDeveloperIdentity

Registers (or retrieves) a Cognito `IdentityId` and an OpenID Connect token for a user authenticated by your backend authentication process. Supplying multiple logins will create an implicit linked account. You can only specify one developer provider as part of the `Logins` map, which is linked to the identity pool. The developer provider is the "domain" by which Cognito will refer to your users.

You can use `GetOpenIdTokenForDeveloperIdentity` to create a new identity and to link new logins (that is, user credentials issued by a public provider or developer provider) to an existing identity. When you want to create a new identity, the `IdentityId` should be null. When you want to associate a new login with an existing authenticated/unauthenticated identity, you can do so by providing the existing `IdentityId`. This API will create the identity in the specified `IdentityPoolId`.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{  
  "IdentityId": "string",  
  "IdentityPoolId": "string",  
  "Logins": {  
    "string": "string"  
  },  
  "TokenDuration": number  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### **IdentityId (p. 35)**

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

Required: No

### **IdentityPoolId (p. 35)**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

Required: Yes



### Logins (p. 35)

A set of optional name-value pairs that map provider names to provider tokens. Each name-value pair represents a user from a public provider or developer provider. If the user is from a developer provider, the name-value pair will follow the syntax "developer\_provider\_name": "developer\_user\_identifier". The developer provider is the "domain" by which Cognito will refer to your users; you provided this domain while creating/updating the identity pool. The developer user identifier is an identifier from your backend that uniquely identifies a user. When you create an identity pool, you can specify the supported logins.

Type: String to string map

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

Value Length Constraints: Minimum length of 1. Maximum length of 50000.

Required: Yes

### TokenDuration (p. 35)

The expiration time of the token, in seconds. You can specify a custom expiration time for the token so that you can cache it. If you don't provide an expiration time, the token is valid for 15 minutes. You can exchange the token with Amazon STS for temporary AWS credentials, which are valid for a maximum of one hour. The maximum token duration you can set is 24 hours. You should take care in setting the expiration time for a token, as there are significant security implications: an attacker could use a leaked token to access your AWS resources for the token's duration.

Type: Long

Valid Range: Minimum value of 1. Maximum value of 86400.

Required: No

## Response Syntax

```
{
  "IdentityId": "string",
  "Token": "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.

### IdentityId (p. 36)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

### Token (p. 36)

An OpenID token.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **DeveloperUserAlreadyRegisteredException**

The provided developer user identifier is already registered with Cognito under a different identity ID.

HTTP Status Code: 400

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# ListIdentities

Lists the identities in an identity pool.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{  
  "HideDisabled": boolean,  
  "IdentityPoolId": "string",  
  "MaxResults": number,  
  "NextToken": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### HideDisabled (p. 39)

An optional boolean parameter that allows you to hide disabled identities. If omitted, the ListIdentities API will include disabled identities in the response.

Type: Boolean

Required: No

### IdentityPoolId (p. 39)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

Required: Yes

### MaxResults (p. 39)

The maximum number of identities to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 60.

Required: Yes

### NextToken (p. 39)

A pagination token.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [\S]+

Required: No

## Response Syntax

```
{
  "Identities": [
    {
      "CreationDate": number,
      "IdentityId": "string",
      "LastModifiedDate": number,
      "Logins": [ "string" ]
    }
  ],
  "IdentityPoolId": "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.

### Identities (p. 40)

An object containing a set of identities and associated mappings.

Type: Array of [IdentityDescription \(p. 71\)](#) objects

### IdentityPoolId (p. 40)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

### NextToken (p. 40)

A pagination token.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [\S]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### InternalErrorException

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

#### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

#### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

#### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### ListIdentities

The following examples show a request and a response for the `ListIdentities` action. The request and response bodies have been formatted for readability and may not match the `content-length` value.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 234
X-AMZ-TARGET: com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.ListIdentities
HOST: <endpoint>
X-AMZ-DATE: 20140805T162253Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>

{
  "IdentityPoolId": "us-east-1:509f9747-5b5d-484e-a2d7-74fcba108147",
  "MaxResults": 10
}
```

#### Sample Response

```
1.1 200 OK
x-amzn-requestid: 75dbdfc0-29a2-4177-98e5-602c8f2c21eb
date: Tue, 05 Aug 2014 16:22:54 GMT
content-type: application/json
content-length: 353
```

```
{
  "Identities": [
    {
      "IdentityId": "us-east-1:1eeb6443-3fbc-4d3f-a96c-28ff0EXAMPLE",
      "Logins": null
    },
    {
      "IdentityId": "us-east-1:6820d0d3-3c95-4d9f-8813-c4448EXAMPLE",
      "Logins": null
    }
  ],
  "IdentityPoolId": "us-east-1:509f9747-5b5d-484e-a2d7-74fcbEXAMPLE",
  "NextToken": null
}
```

## 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](#)

## ListIdentityPools

Lists all of the Cognito identity pools registered for your account.

You must use AWS Developer credentials to call this API.

### Request Syntax

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

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### MaxResults (p. 43)

The maximum number of identities to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 60.

Required: Yes

#### NextToken (p. 43)

A pagination token.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [*\S*]+

Required: No

### Response Syntax

```
{  
  "IdentityPools": [  
    {  
      "IdentityPoolId": "string",  
      "IdentityPoolName": "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.

#### **IdentityPools (p. 43)**

The identity pools returned by the ListIdentityPools action.

Type: Array of [IdentityPoolShortDescription \(p. 72\)](#) objects

#### **NextToken (p. 43)**

A pagination token.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [\S]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

#### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

#### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

#### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### ListIdentityPools

The following examples show a request and a response for a ListIdentityPools operation. The request and response bodies have been edited for readability and may not match the stated content-length values.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 171
```

```
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.ListIdentityPools
HOST: <endpoint>
X-AMZ-DATE: 20140804T193802Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-
type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>

{
  "MaxResults": 3
}
```

## Sample Response

```
1.1 200 OK
x-amzn-requestid: 84423a7a-4db8-437f-9dfa-f60aacc0f85f
date: Mon, 04 Aug 2014 19:38:03 GMT
content-type: application/json
content-length: 521

{
  "IdentityPools": [
    {
      "IdentityPoolId": "us-east-1:0248e249-21e7-495a-9dd5-b2444EXAMPLE",
      "IdentityPoolName": "MyIdentityPool1"
    },
    {
      "IdentityPoolId": "us-east-1:04507bc2-9e14-4d1b-8cbf-b6f51EXAMPLE",
      "IdentityPoolName": "MyIdentityPool2"
    },
    {
      "IdentityPoolId": "us-east-1:177a950c-2c08-43f0-9983-28727EXAMPLE",
      "IdentityPoolName": "MyIdentityPool3"li
    }
  ],
  "NextToken": "dXMtZWZzdC0xOjE3N2E5NTBjLTJjMDgtNDNmMC05OTgzLTI4NzI3YjQON2Y4MA=="
}
```

## 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](#)

## LookupDeveloperIdentity

Retrieves the `IdentityID` associated with a `DeveloperUserIdentifier` or the list of `DeveloperUserIdentifier` values associated with an `IdentityId` for an existing identity. Either `IdentityID` or `DeveloperUserIdentifier` must not be null. If you supply only one of these values, the other value will be searched in the database and returned as a part of the response. If you supply both, `DeveloperUserIdentifier` will be matched against `IdentityID`. If the values are verified against the database, the response returns both values and is the same as the request. Otherwise a `ResourceConflictException` is thrown.

`LookupDeveloperIdentity` is intended for low-throughput control plane operations: for example, to enable customer service to locate an identity ID by username. If you are using it for higher-volume operations such as user authentication, your requests are likely to be throttled. [GetOpenIdTokenForDeveloperIdentity \(p. 35\)](#) is a better option for higher-volume operations for user authentication.

You must use AWS Developer credentials to call this API.

### Request Syntax

```
{
  "DeveloperUserIdentifier": "string",
  "IdentityId": "string",
  "IdentityPoolId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### [DeveloperUserIdentifier \(p. 46\)](#)

A unique ID used by your backend authentication process to identify a user. Typically, a developer identity provider would issue many developer user identifiers, in keeping with the number of users.

Type: String

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

Required: No

#### [IdentityId \(p. 46\)](#)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

Required: No

### IdentityPoolId (p. 46)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+ : [0-9a-f- ]+

Required: Yes

### MaxResults (p. 46)

The maximum number of identities to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 60.

Required: No

### NextToken (p. 46)

A pagination token. The first call you make will have `NextToken` set to null. After that the service will return `NextToken` values as needed. For example, let's say you make a request with `MaxResults` set to 10, and there are 20 matches in the database. The service will return a pagination token as a part of the response. This token can be used to call the API again and get results starting from the 11th match.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [\S ]+

Required: No

## Response Syntax

```
{
  "DeveloperUserIdentifierList": [ "string" ],
  "IdentityId": "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.

### DeveloperUserIdentifierList (p. 47)

This is the list of developer user identifiers associated with an identity ID. Cognito supports the association of multiple developer user identifiers with an identity ID.

Type: Array of strings

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

### **IdentityId (p. 47)**

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

### **NextToken (p. 47)**

A pagination token. The first call you make will have `NextToken` set to null. After that the service will return `NextToken` values as needed. For example, let's say you make a request with `MaxResults` set to 10, and there are 20 matches in the database. The service will return a pagination token as a part of the response. This token can be used to call the API again and get results starting from the 11th match.

Type: String

Length Constraints: Minimum length of 1.

Pattern: [ \S ]+

## **Errors**

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# MergeDeveloperIdentities

Merges two users having different `IdentityIds`, existing in the same identity pool, and identified by the same developer provider. You can use this action to request that discrete users be merged and identified as a single user in the Cognito environment. Cognito associates the given source user (`SourceUserIdentifier`) with the `IdentityId` of the `DestinationUserIdentifier`. Only developer-authenticated users can be merged. If the users to be merged are associated with the same public provider, but as two different users, an exception will be thrown.

The number of linked logins is limited to 20. So, the number of linked logins for the source user, `SourceUserIdentifier`, and the destination user, `DestinationUserIdentifier`, together should not be larger than 20. Otherwise, an exception will be thrown.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{
  "DestinationUserIdentifier": "string",
  "DeveloperProviderName": "string",
  "IdentityPoolId": "string",
  "SourceUserIdentifier": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### [DestinationUserIdentifier \(p. 50\)](#)

User identifier for the destination user. The value should be a `DeveloperUserIdentifier`.

Type: String

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

Required: Yes

### [DeveloperProviderName \(p. 50\)](#)

The "domain" by which Cognito will refer to your users. This is a (pseudo) domain name that you provide while creating an identity pool. This name acts as a placeholder that allows your backend and the Cognito service to communicate about the developer provider. For the `DeveloperProviderName`, you can use letters as well as period (`.`), underscore (`_`), and dash (`-`).

Type: String

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

Pattern: `[\w._-]+`

Required: Yes

### [IdentityPoolId \(p. 50\)](#)

An identity pool ID in the format `REGION:GUID`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

Required: Yes

#### [SourceUserIdentifier \(p. 50\)](#)

User identifier for the source user. The value should be a `DeveloperUserIdentifier`.

Type: String

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

Required: Yes

## Response Syntax

```
{  
  "IdentityId": "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.

#### [IdentityId \(p. 51\)](#)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

#### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

#### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

#### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.



HTTP Status Code: 400

**ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

**ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

**TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# SetIdentityPoolRoles

Sets the roles for an identity pool. These roles are used when making calls to [GetCredentialsForIdentity](#) (p. 20) action.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{
  "IdentityPoolId": "string",
  "RoleMappings": {
    "string" : {
      "AmbiguousRoleResolution": "string",
      "RulesConfiguration": {
        "Rules": [
          {
            "Claim": "string",
            "MatchType": "string",
            "RoleARN": "string",
            "Value": "string"
          }
        ]
      },
      "Type": "string"
    }
  },
  "Roles": {
    "string" : "string"
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 77).

The request accepts the following data in JSON format.

### IdentityPoolId (p. 53)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+:[0-9a-f-]+

Required: Yes

### RoleMappings (p. 53)

How users for a specific identity provider are to mapped to roles. This is a string to [RoleMapping](#) (p. 74) object map. The string identifies the identity provider, for example, "graph.facebook.com" or "cognito-idp-east-1.amazonaws.com/us-east-1\_abcdefghi:app\_client\_id".

Up to 25 rules can be specified per identity provider.

Type: String to [RoleMapping](#) (p. 74) object map

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

Required: No

#### [Roles \(p. 53\)](#)

The map of roles associated with this pool. For a given role, the key will be either "authenticated" or "unauthenticated" and the value will be the Role ARN.

Type: String to string map

Key Pattern: (un)?authenticated

Value Length Constraints: Minimum length of 20. Maximum length of 2048.

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 \(p. 79\)](#).

### **ConcurrentModificationException**

Thrown if there are parallel requests to modify a resource.

HTTP Status Code: 400

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

## UnlinkDeveloperIdentity

Unlinks a `DeveloperUserIdentifier` from an existing identity. Unlinked developer users will be considered new identities next time they are seen. If, for a given Cognito identity, you remove all federated identities as well as the developer user identifier, the Cognito identity becomes inaccessible.

You must use AWS Developer credentials to call this API.

### Request Syntax

```
{
  "DeveloperProviderName": "string",
  "DeveloperUserIdentifier": "string",
  "IdentityId": "string",
  "IdentityPoolId": "string"
}
```

### Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

#### **DeveloperProviderName (p. 56)**

The "domain" by which Cognito will refer to your users.

Type: String

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

Pattern: [`\w._-`]+

Required: Yes

#### **DeveloperUserIdentifier (p. 56)**

A unique ID used by your backend authentication process to identify a user.

Type: String

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

Required: Yes

#### **IdentityId (p. 56)**

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [`\w-`]+ : [`0-9a-f-`]+

Required: Yes

#### **IdentityPoolId (p. 56)**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

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 \(p. 79\)](#).

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go](#)

- [AWS SDK for Java](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

# UnlinkIdentity

Unlinks a federated identity from an existing account. Unlinked logins will be considered new identities next time they are seen. Removing the last linked login will make this identity inaccessible.

This is a public API. You do not need any credentials to call this API.

## Request Syntax

```
{
  "IdentityId": "string",
  "Logins": {
    "string" : "string"
  },
  "LoginsToRemove": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 77\)](#).

The request accepts the following data in JSON format.

### IdentityId (p. 59)

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+:[0-9a-f-]+

Required: Yes

### Logins (p. 59)

A set of optional name-value pairs that map provider names to provider tokens.

Type: String to string map

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

Value Length Constraints: Minimum length of 1. Maximum length of 50000.

Required: Yes

### LoginsToRemove (p. 59)

Provider names to unlink from this identity.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 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 \(p. 79\)](#).

### **ExternalServiceException**

An exception thrown when a dependent service such as Facebook or Twitter is not responding

HTTP Status Code: 400

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### UnlinkIdentity

The following example shows an `UnlinkIdentity` request. The request body has been formatted for readability and may not match the `content-length` value.

#### Sample Request

```
POST / HTTP/1.1
```

```
CONTENT-TYPE: application/json
CONTENT-LENGTH: 307
X-AMZ-TARGET: com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.UnlinkIdentity
HOST: <endpoint>
X-AMZ-DATE: 20140805T164904Z

{
  "IdentityId": "us-east-1:6820d0d3-3c95-4d9f-8813-c4448fca995f",
  "Logins":
  {
    "accounts.google.com": "<PROVIDER_TOKEN>"
  },
  "LoginsToRemove": ["accounts.google.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](#)

# UpdateIdentityPool

Updates an identity pool.

You must use AWS Developer credentials to call this API.

## Request Syntax

```
{
  "AllowUnauthenticatedIdentities": boolean,
  "CognitoIdentityProviders": [
    {
      "ClientId": "string",
      "ProviderName": "string",
      "ServerSideTokenCheck": boolean
    }
  ],
  "DeveloperProviderName": "string",
  "IdentityPoolId": "string",
  "IdentityPoolName": "string",
  "OpenIdConnectProviderARNs": [ "string" ],
  "SamlProviderARNs": [ "string" ],
  "SupportedLoginProviders": {
    "string" : "string"
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 77).

The request accepts the following data in JSON format.

### **AllowUnauthenticatedIdentities** (p. 62)

TRUE if the identity pool supports unauthenticated logins.

Type: Boolean

Required: Yes

### **CognitoIdentityProviders** (p. 62)

A list representing an Amazon Cognito user pool and its client ID.

Type: Array of [CognitoIdentityProvider](#) (p. 69) objects

Required: No

### **DeveloperProviderName** (p. 62)

The "domain" by which Cognito will refer to your users.

Type: String

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

Pattern: [\w.\_- ]+

Required: No

### IdentityPoolId (p. 62)

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

Required: Yes

### IdentityPoolName (p. 62)

A string that you provide.

Type: String

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

Pattern: [ \w ]+

Required: Yes

### OpenIdConnectProviderARNs (p. 62)

A list of OpenID Connect provider ARNs.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### SamlProviderARNs (p. 62)

An array of Amazon Resource Names (ARNs) of the SAML provider for your identity pool.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: No

### SupportedLoginProviders (p. 62)

Optional key:value pairs mapping provider names to provider app IDs.

Type: String to string map

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

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

Value Pattern: [ \w . ; \_ / - ]+

Required: No

## Response Syntax

```
{  
  "AllowUnauthenticatedIdentities": boolean,}
```

```
"CognitoIdentityProviders": [
  {
    "ClientId": "string",
    "ProviderName": "string",
    "ServerSideTokenCheck": boolean
  }
],
"DeveloperProviderName": "string",
"IdentityPoolId": "string",
"IdentityPoolName": "string",
"OpenIdConnectProviderARNs": [ "string" ],
"SamlProviderARNs": [ "string" ],
"SupportedLoginProviders": {
  "string" : "string"
}
}
```

## Response Elements

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

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

### **AllowUnauthenticatedIdentities (p. 63)**

TRUE if the identity pool supports unauthenticated logins.

Type: Boolean

### **CognitoIdentityProviders (p. 63)**

A list representing an Amazon Cognito user pool and its client ID.

Type: Array of [CognitoIdentityProvider \(p. 69\)](#) objects

### **DeveloperProviderName (p. 63)**

The "domain" by which Cognito will refer to your users.

Type: String

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

Pattern: [\w.\_- ]+

### **IdentityPoolId (p. 63)**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w- ]+ : [0-9a-f- ]+

### **IdentityPoolName (p. 63)**

A string that you provide.

Type: String

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

Pattern: [\w ]+

### **OpenIdConnectProviderARNs (p. 63)**

A list of OpenID Connect provider ARNs.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

### **SamlProviderARNs (p. 63)**

An array of Amazon Resource Names (ARNs) of the SAML provider for your identity pool.

Type: Array of strings

Length Constraints: Minimum length of 20. Maximum length of 2048.

### **SupportedLoginProviders (p. 63)**

Optional key:value pairs mapping provider names to provider app IDs.

Type: String to string map

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

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

Value Pattern: [`\w. ;_/-` ]+

## Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 79\)](#).

### **ConcurrentModificationException**

Thrown if there are parallel requests to modify a resource.

HTTP Status Code: 400

### **InternalErrorException**

Thrown when the service encounters an error during processing the request.

HTTP Status Code: 500

### **InvalidParameterException**

Thrown for missing or bad input parameter(s).

HTTP Status Code: 400

### **LimitExceededException**

Thrown when the total number of user pools has exceeded a preset limit.

HTTP Status Code: 400

### **NotAuthorizedException**

Thrown when a user is not authorized to access the requested resource.

HTTP Status Code: 400

### **ResourceConflictException**

Thrown when a user tries to use a login which is already linked to another account.

HTTP Status Code: 400

#### **ResourceNotFoundException**

Thrown when the requested resource (for example, a dataset or record) does not exist.

HTTP Status Code: 400

#### **TooManyRequestsException**

Thrown when a request is throttled.

HTTP Status Code: 400

## Example

### UpdateIdentityPool

The following examples show a request and response for the `UpdateIdentityPool` action. The request and response bodies have been formatted for readability and may not match the `content-length` value. Note: For the key `"api.twitter.com"` and `"www.digits.com"` the value to be set in the dictionary is a concatenation of the consumer key and consumer secret strings separated by a semicolon.

#### Sample Request

```
POST / HTTP/1.1
CONTENT-TYPE: application/json
CONTENT-LENGTH: 423
X-AMZ-TARGET:
  com.amazonaws.cognito.identity.model.AWSCognitoIdentityService.UpdateIdentityPool
HOST: <endpoint>
X-AMZ-DATE: 20140804T232959Z
AUTHORIZATION: AWS4-HMAC-SHA256 Credential=<credential>, SignedHeaders=content-
type;content-length;host;x-amz-date;x-amz-target, Signature=<signature>

{
  "IdentityPoolId": "us-east-1:c1731993-c776-4ae2-86c6-554aeEXAMPLE",
  "IdentityPoolName": "MyIdentityPool",
  "AllowUnauthenticatedIdentities": true,
  "SupportedLoginProviders":
  {
    "www.amazon.com": "amzn1.application-oa2-client.188a56d827a7d6555a8b67a5d",
    "graph.facebook.com": "7346241598935555",
    "accounts.google.com": "123456789012.apps.googleusercontent.com",
    "api.twitter.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw",
    "www.digits.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw"
  }
}
```

#### Sample Response

```
1.1 200 OK
x-amzn-requestid: a1174234-ef05-4c60-bfcb-04176a6ba6a3
date: Mon, 04 Aug 2014 23:30:00 GMT
content-type: application/json
```

```
content-length: 356

{
  "AllowUnauthenticatedIdentities": true,
  "IdentityPoolId": "us-east-1:c1731993-c776-4ae2-86c6-554aeEXAMPLE",
  "IdentityPoolName": "MyIdentityPool",
  "SupportedLoginProviders":
  {
    "www.amazon.com": "amzn1.application-oa2-client.188a56d827a7d6555a8b67a5d",
    "graph.facebook.com": "7346241598935555",
    "accounts.google.com": "123456789012.apps.googleusercontent.com",
    "api.twitter.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw",
    "www.digits.com":
    "xvz1evFS4wEEPTGEFPHBog;kAcSOqF21Fu85e7zjz7ZN2U4ZRhfV3WpwPAoE3Z7kBw"
  }
}
```

## 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](#)



# Data Types

The Amazon Cognito Identity 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:

- [CognitoIdentityProvider](#) (p. 69)
- [Credentials](#) (p. 70)
- [IdentityDescription](#) (p. 71)
- [IdentityPoolShortDescription](#) (p. 72)
- [MappingRule](#) (p. 73)
- [RoleMapping](#) (p. 74)
- [RulesConfigurationType](#) (p. 75)
- [UnprocessedIdentityId](#) (p. 76)

# CognitoidentityProvider

A provider representing an Amazon Cognito user pool and its client ID.

## Contents

### ClientId

The client ID for the Amazon Cognito user pool.

Type: String

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

Pattern: [`\w_`]+

Required: No

### ProviderName

The provider name for an Amazon Cognito user pool. For example, `cognito-idp.us-east-1.amazonaws.com/us-east-1_123456789`.

Type: String

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

Pattern: [`\w._:/-`]+

Required: No

### ServerSideTokenCheck

TRUE if server-side token validation is enabled for the identity provider's token.

Once you set `ServerSideTokenCheck` to TRUE for an identity pool, that identity pool will check with the integrated user pools to make sure that the user has not been globally signed out or deleted before the identity pool provides an OIDC token or AWS credentials for the user.

If the user is signed out or deleted, the identity pool will return a 400 Not Authorized error.

Type: Boolean

Required: No

## See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

# Credentials

Credentials for the provided identity ID.

## Contents

### **AccessKeyId**

The Access Key portion of the credentials.

Type: String

Required: No

### **Expiration**

The date at which these credentials will expire.

Type: Timestamp

Required: No

### **SecretKey**

The Secret Access Key portion of the credentials

Type: String

Required: No

### **SessionToken**

The Session Token portion of the credentials

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](#)

# IdentityDescription

A description of the identity.

## Contents

### **CreationDate**

Date on which the identity was created.

Type: Timestamp

Required: No

### **IdentityId**

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [ \w- ]+ : [ 0-9a-f- ]+

Required: No

### **LastModifiedDate**

Date on which the identity was last modified.

Type: Timestamp

Required: No

### **Logins**

The provider names.

Type: Array of strings

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](#)

# IdentityPoolShortDescription

A description of the identity pool.

## Contents

### **IdentityPoolId**

An identity pool ID in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: [\w-]+:[0-9a-f-]+

Required: No

### **IdentityPoolName**

A string that you provide.

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](#)

# MappingRule

A rule that maps a claim name, a claim value, and a match type to a role ARN.

## Contents

### Claim

The claim name that must be present in the token, for example, "isAdmin" or "paid".

Type: String

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

Pattern: [ \p{L}\p{M}\p{S}\p{N}\p{P} ]+

Required: Yes

### MatchType

The match condition that specifies how closely the claim value in the IdP token must match `Value`.

Type: String

Valid Values: `Equals` | `Contains` | `StartsWith` | `NotEqual`

Required: Yes

### RoleARN

The role ARN.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Required: Yes

### Value

A brief string that the claim must match, for example, "paid" or "yes".

Type: String

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

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](#)

# RoleMapping

A role mapping.

## Contents

### AmbiguousRoleResolution

If you specify `Token` or `Rules` as the `Type`, `AmbiguousRoleResolution` is required.

Specifies the action to be taken if either no rules match the claim value for the `Rules` type, or there is no `cognito:preferred_role` claim and there are multiple `cognito:roles` matches for the `Token` type.

Type: String

Valid Values: `AuthenticatedRole` | `Deny`

Required: No

### RulesConfiguration

The rules to be used for mapping users to roles.

If you specify `Rules` as the role mapping type, `RulesConfiguration` is required.

Type: [RulesConfigurationType](#) (p. 75) object

Required: No

### Type

The role mapping type. `Token` will use `cognito:roles` and `cognito:preferred_role` claims from the Cognito identity provider token to map groups to roles. `Rules` will attempt to match claims from the token to map to a role.

Type: String

Valid Values: `Token` | `Rules`

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](#)

# RulesConfigurationType

A container for rules.

## Contents

### Rules

An array of rules. You can specify up to 25 rules per identity provider.

Rules are evaluated in order. The first one to match specifies the role.

Type: Array of [MappingRule \(p. 73\)](#) objects

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

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](#)



## UnprocessedIdentityId

An array of UnprocessedIdentityId objects, each of which contains an ErrorCode and IdentityId.

### Contents

#### ErrorCode

The error code indicating the type of error that occurred.

Type: String

Valid Values: `AccessDenied` | `InternalServerError`

Required: No

#### IdentityId

A unique identifier in the format REGION:GUID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 55.

Pattern: `[\w-]+:[0-9a-f-]+`

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](#)

# 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'THHMMSS'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