
Amazon Managed Blockchain

API Reference

API Version 2018-09-24



Amazon Managed Blockchain: API Reference

Copyright © 2019 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

Table of Contents

| | |
|-------------------------------|----|
| Welcome | 1 |
| Actions | 2 |
| CreateMember | 3 |
| Request Syntax | 3 |
| URI Request Parameters | 3 |
| Request Body | 3 |
| Response Syntax | 4 |
| Response Elements | 4 |
| Errors | 4 |
| See Also | 4 |
| CreateNetwork | 6 |
| Request Syntax | 6 |
| URI Request Parameters | 6 |
| Request Body | 6 |
| Response Syntax | 7 |
| Response Elements | 7 |
| Errors | 7 |
| See Also | 8 |
| CreateNetworkInvitation | 9 |
| Request Syntax | 9 |
| URI Request Parameters | 9 |
| Request Body | 9 |
| Response Syntax | 9 |
| Response Elements | 10 |
| Errors | 10 |
| See Also | 10 |
| CreateNode | 11 |
| Request Syntax | 11 |
| URI Request Parameters | 11 |
| Request Body | 11 |
| Response Syntax | 12 |
| Response Elements | 12 |
| Errors | 12 |
| See Also | 12 |
| DeleteMember | 14 |
| Request Syntax | 14 |
| URI Request Parameters | 14 |
| Request Body | 14 |
| Response Syntax | 14 |
| Response Elements | 14 |
| Errors | 14 |
| See Also | 15 |
| DeleteNetworkInvitation | 16 |
| Request Syntax | 16 |
| URI Request Parameters | 16 |
| Request Body | 16 |
| Response Syntax | 16 |
| Response Elements | 16 |
| Errors | 16 |
| See Also | 17 |
| DeleteNode | 18 |
| Request Syntax | 18 |
| URI Request Parameters | 18 |
| Request Body | 18 |

| | |
|------------------------------|----|
| Response Syntax | 18 |
| Response Elements | 18 |
| Errors | 18 |
| See Also | 19 |
| GetMember | 20 |
| Request Syntax | 20 |
| URI Request Parameters | 20 |
| Request Body | 20 |
| Response Syntax | 20 |
| Response Elements | 20 |
| Errors | 21 |
| See Also | 21 |
| GetNetwork | 22 |
| Request Syntax | 22 |
| URI Request Parameters | 22 |
| Request Body | 22 |
| Response Syntax | 22 |
| Response Elements | 22 |
| Errors | 23 |
| See Also | 23 |
| GetNode | 24 |
| Request Syntax | 24 |
| URI Request Parameters | 24 |
| Request Body | 24 |
| Response Syntax | 24 |
| Response Elements | 25 |
| Errors | 25 |
| See Also | 25 |
| ListInvitedNetworks | 26 |
| Request Syntax | 26 |
| URI Request Parameters | 26 |
| Request Body | 26 |
| Response Syntax | 26 |
| Response Elements | 27 |
| Errors | 27 |
| See Also | 27 |
| ListMembers | 29 |
| Request Syntax | 29 |
| URI Request Parameters | 29 |
| Request Body | 29 |
| Response Syntax | 29 |
| Response Elements | 30 |
| Errors | 30 |
| See Also | 30 |
| ListNetworks | 32 |
| Request Syntax | 32 |
| URI Request Parameters | 32 |
| Request Body | 32 |
| Response Syntax | 32 |
| Response Elements | 33 |
| Errors | 33 |
| See Also | 33 |
| ListNodes | 35 |
| Request Syntax | 35 |
| URI Request Parameters | 35 |
| Request Body | 35 |
| Response Syntax | 35 |

| | |
|------------------------------------|----|
| Response Elements | 36 |
| Errors | 36 |
| See Also | 36 |
| Data Types | 38 |
| InvitedNetworkSummary | 39 |
| Contents | 39 |
| See Also | 39 |
| Member | 40 |
| Contents | 40 |
| See Also | 41 |
| MemberConfiguration | 42 |
| Contents | 42 |
| See Also | 42 |
| MemberFabricAttributes | 43 |
| Contents | 43 |
| See Also | 43 |
| MemberFabricConfiguration | 44 |
| Contents | 44 |
| See Also | 44 |
| MemberFrameworkAttributes | 45 |
| Contents | 45 |
| See Also | 45 |
| MemberFrameworkConfiguration | 46 |
| Contents | 46 |
| See Also | 46 |
| MemberSummary | 47 |
| Contents | 47 |
| See Also | 48 |
| Network | 49 |
| Contents | 49 |
| See Also | 50 |
| NetworkConfiguration | 51 |
| Contents | 51 |
| See Also | 51 |
| NetworkFabricAttributes | 52 |
| Contents | 52 |
| See Also | 52 |
| NetworkFrameworkAttributes | 53 |
| Contents | 53 |
| See Also | 53 |
| NetworkSummary | 54 |
| Contents | 54 |
| See Also | 55 |
| Node | 56 |
| Contents | 56 |
| See Also | 57 |
| NodeConfiguration | 58 |
| Contents | 58 |
| See Also | 58 |
| NodeFabricAttributes | 59 |
| Contents | 59 |
| See Also | 59 |
| NodeFrameworkAttributes | 60 |
| Contents | 60 |
| See Also | 60 |
| NodeSummary | 61 |
| Contents | 61 |

| | |
|-------------------------|----|
| See Also | 62 |
| Common Parameters | 63 |
| Common Errors | 65 |

Welcome

This is prerelease documentation for a service in preview release. It is subject to change. For more information, see [About the Amazon Managed Blockchain Preview](#).

Amazon Managed Blockchain is a fully managed service for creating and managing blockchain using Hyperledger Fabric and Ethereum open source frameworks (only Hyperledger Fabric is available in the preview).

This document was last published on January 21, 2019.

Actions

The following actions are supported:

- [CreateMember](#) (p. 3)
- [CreateNetwork](#) (p. 6)
- [CreateNetworkInvitation](#) (p. 9)
- [CreateNode](#) (p. 11)
- [DeleteMember](#) (p. 14)
- [DeleteNetworkInvitation](#) (p. 16)
- [DeleteNode](#) (p. 18)
- [GetMember](#) (p. 20)
- [GetNetwork](#) (p. 22)
- [GetNode](#) (p. 24)
- [ListInvitedNetworks](#) (p. 26)
- [ListMembers](#) (p. 29)
- [ListNetworks](#) (p. 32)
- [ListNodes](#) (p. 35)

CreateMember

Creates a member within the blockchain network.

Request Syntax

```
POST /networks/networkId/members HTTP/1.1
Content-type: application/json

{
  "ClientRequestToken": "string",
  "MemberConfiguration": {
    "Description": "string",
    "FrameworkConfiguration": {
      "Fabric": {
        "AdminPassword": "string",
        "AdminUsername": "string"
      }
    },
    "Name": "string"
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

NetworkId (p. 3)

The unique identifier of the network in which the member is created.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request accepts the following data in JSON format.

ClientRequestToken (p. 3)

An idempotency token. Set to an arbitrary unique value.

Type: String

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

Required: Yes

MemberConfiguration (p. 3)

Member configuration parameters.

Type: [MemberConfiguration \(p. 42\)](#) object

Required: Yes

Response Syntax

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

{
  "MemberId": "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.

MemberId (p. 4)

The unique identifier of the member.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceAlreadyExistsException

HTTP Status Code: 409

ResourceLimitExceededException

HTTP Status Code: 429

ResourceNotFoundException

HTTP Status Code: 404

ResourceNotReadyException

HTTP Status Code: 409

ThrottlingException

HTTP Status Code: 429

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](#)

CreateNetwork

Creates a new blockchain network using Amazon Managed Blockchain.

Request Syntax

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

{
  "ClientRequestToken": "string",
  "MemberConfiguration": {
    "Description": "string",
    "FrameworkConfiguration": {
      "Fabric": {
        "AdminPassword": "string",
        "AdminUsername": "string"
      }
    },
    "Name": "string"
  },
  "NetworkConfiguration": {
    "Description": "string",
    "Framework": "string",
    "FrameworkVersion": "string",
    "Name": "string"
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

ClientRequestToken (p. 6)

An idempotency token. Set to an arbitrary unique value.

Type: String

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

Required: Yes

MemberConfiguration (p. 6)

Configuration properties for the first member within the network.

Type: [MemberConfiguration \(p. 42\)](#) object

Required: Yes

NetworkConfiguration (p. 6)

Configuration properties for the blockchain network.

Type: [NetworkConfiguration \(p. 51\)](#) object

Required: Yes

Response Syntax

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

{
  "MemberId": "string",
  "NetworkId": "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.

MemberId (p. 7)

The unique identifier for the first member within the network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 7)

The unique identifier for the network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceAlreadyExistsException

HTTP Status Code: 409

ResourceLimitExceededException

HTTP Status Code: 429

ThrottlingException

HTTP Status Code: 429

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](#)

CreateNetworkInvitation

Invites another AWS account to create a member on the specified network. The invited AWS account can see the specified network ID using `ListInvitedNetworks`, and can use `GetNetwork` on the specified network.

Request Syntax

```
POST /networks/networkId/invitations HTTP/1.1
Content-type: application/json

{
  "ExpirationDate": number,
  "InviteeAccountId": "string"
}
```

URI Request Parameters

The request requires the following URI parameters.

NetworkId (p. 9)

The network ID that the AWS account is invited to join.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request accepts the following data in JSON format.

ExpirationDate (p. 9)

The latest date and time that the invitation is valid. After this date and time, the invitation is no longer valid.

Type: Timestamp

Required: No

InviteeAccountId (p. 9)

The AWS account to send the invitation to join the network to.

Type: String

Length Constraints: Fixed length of 12.

Pattern: `\d+`

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceLimitExceededException

HTTP Status Code: 429

ResourceNotFoundException

HTTP Status Code: 404

ResourceNotReadyException

HTTP Status Code: 409

ThrottlingException

HTTP Status Code: 429

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](#)

CreateNode

Creates a peer node within a network membership.

Request Syntax

```
POST /networks/networkId/members/memberId/nodes HTTP/1.1
Content-type: application/json

{
  "ClientRequestToken": "string",
  "NodeConfiguration": {
    "AvailabilityZone": "string",
    "DataVolumeSize": number,
    "InstanceType": "string"
  }
}
```

URI Request Parameters

The request requires the following URI parameters.

MemberId (p. 11)

The unique identifier of the member that owns this node.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 11)

The unique identifier of the network in which this node runs.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request accepts the following data in JSON format.

ClientRequestToken (p. 11)

An idempotency token. Set to an arbitrary unique value.

Type: String

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

Required: Yes

NodeConfiguration (p. 11)

The properties of a node configuration.

Type: [NodeConfiguration \(p. 58\)](#) object

Required: Yes

Response Syntax

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

{
  "NodeId": "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.

NodeId (p. 12)

The unique identifier of the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceAlreadyExistsException

HTTP Status Code: 409

ResourceLimitExceededException

HTTP Status Code: 429

ResourceNotFoundException

HTTP Status Code: 404

ResourceNotReadyException

HTTP Status Code: 409

ThrottlingException

HTTP Status Code: 429

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](#)

DeleteMember

Deletes a member. Removes the member and all associated resources from the network. If this is the last member in a network, the network is deleted also.

Request Syntax

```
DELETE /networks/networkId/members/memberId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

MemberId (p. 14)

The unique identifier of the member to remove.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 14)

The unique identifier of the network from which the member is removed.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ResourceNotReadyException

HTTP Status Code: 409

ThrottlingException

HTTP Status Code: 429

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](#)

DeleteNetworkInvitation

Deletes a network invitation.

Request Syntax

```
DELETE /networks/networkId/invitations/inviteeAccountId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

InviteeAccountId (p. 16)

The AWS account that is invited to create a member.

Length Constraints: Fixed length of 12.

Pattern: \d+

NetworkId (p. 16)

The unique identifier of the network for which the invitation is valid.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ThrottlingException

HTTP Status Code: 429

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](#)

DeleteNode

Deletes a node from your membership. All data on the node is lost and cannot be recovered.

Request Syntax

```
DELETE /networks/networkId/members/memberId/nodes/nodeId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

MemberId (p. 18)

The unique identifier of the member that owns this node.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 18)

The unique identifier of the network that the node belongs to.

Length Constraints: Minimum length of 1. Maximum length of 32.

NodeId (p. 18)

The unique identifier of the node.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ResourceNotReadyException

HTTP Status Code: 409

ThrottlingException

HTTP Status Code: 429

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](#)

GetMember

Returns detailed information about a member.

Request Syntax

```
GET /networks/networkId/members/memberId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

MemberId (p. 20)

The unique identifier of the member.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 20)

The unique identifier of the network to which the member belongs.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Member": {
    "CreationDate": number,
    "Description": "string",
    "FrameworkAttributes": {
      "Fabric": {
        "AdminUsername": "string",
        "CaEndpoint": "string"
      }
    },
    "Id": "string",
    "Name": "string",
    "NetworkId": "string",
    "Status": "string",
    "StatusReason": "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.

Member (p. 20)

The properties of a member.

Type: [Member \(p. 40\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ThrottlingException

HTTP Status Code: 429

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](#)

GetNetwork

Returns detailed information about a network.

Request Syntax

```
GET /networks/networkId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

NetworkId (p. 22)

The unique identifier of the network to get information about.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Network": {
    "CreationDate": number,
    "Description": "string",
    "Framework": "string",
    "FrameworkAttributes": {
      "Fabric": {
        "OrderingServiceEndpoint": "string"
      }
    },
    "FrameworkVersion": "string",
    "Id": "string",
    "Name": "string",
    "Status": "string",
    "StatusReason": "string",
    "VpcEndpointServiceName": "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.

Network (p. 22)

An object containing network configuration parameters.

Type: [Network \(p. 49\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ThrottlingException

HTTP Status Code: 429

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](#)

GetNode

Returns detailed information about a node within a membership.

Request Syntax

```
GET /networks/networkId/members/memberId/nodes/nodeId HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

MemberId (p. 24)

The unique identifier of the member that owns the node.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 24)

The unique identifier of the network to which the node belongs.

Length Constraints: Minimum length of 1. Maximum length of 32.

NodeId (p. 24)

The unique identifier of the node.

Length Constraints: Minimum length of 1. Maximum length of 32.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "Node": {
    "AvailabilityZone": "string",
    "CreationDate": number,
    "DataVolumeSize": number,
    "Endpoint": "string",
    "FrameworkAttributes": {
      "Fabric": {
        "PeerEventPort": "string"
      }
    },
    "Id": "string",
    "InstanceType": "string",
    "MemberId": "string",
    "NetworkId": "string",
    "Status": "string",
    "StatusReason": "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.

Node (p. 24)

Properties of the node configuration.

Type: [Node \(p. 56\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ResourceNotFoundException

HTTP Status Code: 404

ThrottlingException

HTTP Status Code: 429

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](#)

ListInvitedNetworks

Lists the networks that the AWS account has been invited to be a member of.

Request Syntax

```
GET /invitedNetworks?  
framework=Framework&maxResults=MaxResults&name=Name&nextToken=NextToken&status=Status  
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

Framework (p. 26)

The blockchain framework type.

Valid Values: HYPERLEDGER_FABRIC

MaxResults (p. 26)

The maximum number of networks to show in the list.

Valid Range: Minimum value of 1. Maximum value of 10.

Name (p. 26)

The name of the network.

NextToken (p. 26)

The pagination token that indicates the next set of results to retrieve.

Length Constraints: Maximum length of 128.

Status (p. 26)

Filters the list of networks returned to those with this status.

Valid Values: CREATING | ACTIVE | FAILED | DELETING | DELETED

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200  
Content-type: application/json  
  
{  
  "InvitedNetworks": [  
    {  
      "Description": "string",  
      "Id": "string",  
      "Name": "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.

InvitedNetworks (p. 26)

The networks that the AWS account has been invited to.

Type: Array of [InvitedNetworkSummary](#) (p. 39) objects

NextToken (p. 26)

The pagination token that indicates the next set of results to retrieve.

Type: String

Length Constraints: Maximum length of 128.

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 65).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ThrottlingException

HTTP Status Code: 429

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](#)

ListMembers

Lists the members in a network and properties of their configurations.

Request Syntax

```
GET /networks/networkId/members?  
isOwned=IsOwned&maxResults=MaxResults&name=Name&nextToken=NextToken&status=Status HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

IsOwned (p. 29)

An optional Boolean value. If provided, the request is limited either to members that the current AWS account owns (`true`) or that other AWS accounts own (`false`). If omitted, all members are listed.

MaxResults (p. 29)

The maximum number of members to return in the request.

Valid Range: Minimum value of 1. Maximum value of 20.

Name (p. 29)

The optional name of the member to list.

NetworkId (p. 29)

The unique identifier of the network for which to list members.

Length Constraints: Minimum length of 1. Maximum length of 32.

NextToken (p. 29)

The pagination token that indicates the next set of results to retrieve.

Length Constraints: Maximum length of 128.

Status (p. 29)

The status of the membership.

Valid Values: CREATING | ACTIVE | FAILED | DELETING | DELETED

Request Body

The request does not have a request body.

Response Syntax

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

```
"Members": [  
  {  
    "CreationDate": number,  
    "Description": "string",  
    "Id": "string",  
    "IsOwned": boolean,  
    "Name": "string",  
    "NetworkId": "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.

Members (p. 29)

An array of `MemberSummary` objects. Each object contains details about a network member.

Type: Array of [MemberSummary \(p. 47\)](#) objects

NextToken (p. 29)

The pagination token that indicates the next set of results to retrieve.

Type: String

Length Constraints: Maximum length of 128.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ThrottlingException

HTTP Status Code: 429

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](#)

ListNetworks

Returns information about the networks in which the current AWS account has memberships.

Request Syntax

```
GET /networks?  
framework=Framework&maxResults=MaxResults&name=Name&nextToken=NextToken&status=Status  
HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

Framework (p. 32)

An optional framework specifier. If provided, only networks of this framework type are listed.

Valid Values: HYPERLEDGER_FABRIC

MaxResults (p. 32)

The maximum number of networks to list.

Valid Range: Minimum value of 1. Maximum value of 10.

Name (p. 32)

The name of the network.

NextToken (p. 32)

The pagination token that indicates the next set of results to retrieve.

Length Constraints: Maximum length of 128.

Status (p. 32)

An optional status specifier. If provided, only networks currently in this status are listed.

Valid Values: CREATING | ACTIVE | FAILED | DELETING | DELETED

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200  
Content-type: application/json  
  
{  
  "Networks": [  
    {  
      "CreationDate": number,  
      "Description": "string",  
      "Framework": "string",  
      "FrameworkVersion": "string",
```

```
    "Id": "string",  
    "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.

Networks (p. 32)

An array of `NetworkSummary` objects that contain configuration properties for each network.

Type: Array of [NetworkSummary \(p. 54\)](#) objects

NextToken (p. 32)

The pagination token that indicates the next set of results to retrieve.

Type: String

Length Constraints: Maximum length of 128.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 65\)](#).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ThrottlingException

HTTP Status Code: 429

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](#)

ListNodes

Returns information about the nodes within a network.

Request Syntax

```
GET /networks/networkId/members/memberId/nodes?  
maxResults=MaxResults&nextToken=NextToken&status=Status HTTP/1.1
```

URI Request Parameters

The request requires the following URI parameters.

MaxResults (p. 35)

The maximum number of nodes to list.

Valid Range: Minimum value of 1. Maximum value of 20.

MemberId (p. 35)

The unique identifier of the member who owns the nodes to list.

Length Constraints: Minimum length of 1. Maximum length of 32.

NetworkId (p. 35)

The unique identifier of the network for which to list nodes.

Length Constraints: Minimum length of 1. Maximum length of 32.

NextToken (p. 35)

The pagination token that indicates the next set of results to retrieve.

Length Constraints: Maximum length of 128.

Status (p. 35)

Optional. Specifies a status for the nodes to list. If provided, only nodes with this status are listed.

Valid Values: CREATING | HEALTHY | UNHEALTHY | FAILED | DELETING | DELETED

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200  
Content-type: application/json  
  
{  
  "NextToken": "string",  
  "Nodes": [  
    {  
      "AvailabilityZone": "string",
```

```
    "CreationDate": number,  
    "Endpoint": "string",  
    "Id": "string",  
    "InstanceType": "string",  
    "MemberId": "string",  
    "NetworkId": "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.

NextToken (p. 35)

The pagination token that indicates the next set of results to retrieve.

Type: String

Length Constraints: Maximum length of 128.

Nodes (p. 35)

An array of `NodeSummary` objects that contain configuration properties for each node.

Type: Array of `NodeSummary` (p. 61) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 65).

AccessDeniedException

HTTP Status Code: 403

InternalServerErrorException

HTTP Status Code: 500

InvalidRequestException

HTTP Status Code: 400

ThrottlingException

HTTP Status Code: 429

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 Managed Blockchain 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:

- [InvitedNetworkSummary](#) (p. 39)
- [Member](#) (p. 40)
- [MemberConfiguration](#) (p. 42)
- [MemberFabricAttributes](#) (p. 43)
- [MemberFabricConfiguration](#) (p. 44)
- [MemberFrameworkAttributes](#) (p. 45)
- [MemberFrameworkConfiguration](#) (p. 46)
- [MemberSummary](#) (p. 47)
- [Network](#) (p. 49)
- [NetworkConfiguration](#) (p. 51)
- [NetworkFabricAttributes](#) (p. 52)
- [NetworkFrameworkAttributes](#) (p. 53)
- [NetworkSummary](#) (p. 54)
- [Node](#) (p. 56)
- [NodeConfiguration](#) (p. 58)
- [NodeFabricAttributes](#) (p. 59)
- [NodeFrameworkAttributes](#) (p. 60)
- [NodeSummary](#) (p. 61)

InvitedNetworkSummary

Describes a network to which an AWS account has been invited to be a member.

Contents

Description

The network description.

Type: String

Length Constraints: Maximum length of 128.

Required: No

Id

A unique network identifier.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Name

The network name.

Type: String

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

Pattern: `.*\S.*`

Required: No

See Also

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

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

Member

Member configuration properties.

Contents

CreationDate

The date and time that the member was created.

Type: Timestamp

Required: No

Description

An optional description for the member.

Type: String

Length Constraints: Maximum length of 128.

Required: No

FrameworkAttributes

Attributes of the blockchain framework being used.

Type: [MemberFrameworkAttributes \(p. 45\)](#) object

Required: No

Id

The unique identifier of the member.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Name

The name of the member.

Type: String

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

Pattern: `^(?!-)[^0-9](?!.*--)[A-Za-z0-9-]+[^-]$`

Required: No

NetworkId

The unique identifier of the network to which the member belongs.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Status

The status of the network membership.

Type: String

Valid Values: `CREATING` | `ACTIVE` | `FAILED` | `DELETING` | `DELETED`

Required: No

StatusReason

The reason that the membership is in the current status.

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](#)

MemberConfiguration

Configuration properties of the member.

Contents

Description

An optional description of the member.

Type: String

Length Constraints: Maximum length of 128.

Required: No

FrameworkConfiguration

Configuration properties of the blockchain framework relevant to the member.

Type: [MemberFrameworkConfiguration \(p. 46\)](#) object

Required: Yes

Name

The name of the member.

Type: String

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

Pattern: `.*\S.*`

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](#)

MemberFabricAttributes

Attributes of Hyperledger Fabric for a specific member in the network.

Contents

AdminUsername

The user name for the initial administrator user in a membership in a Hyperledger Fabric network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

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

Required: No

CaEndpoint

The endpoint used to access the certificate authority within a membership.

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](#)

MemberFabricConfiguration

Configuration properties for Hyperledger Fabric for a member in the network.

Contents

AdminPassword

The password for the initial administrator user in a membership.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 32.

Pattern: `^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)(?!.*['\"/])[a-zA-Z0-9\S]*$`

Required: Yes

AdminUsername

The user name for the initial administrator user in a membership."

Type: String

Length Constraints: Minimum length of 1. Maximum length of 16.

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

Required: Yes

See Also

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

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

MemberFrameworkAttributes

Attributes for a specific blockchain framework for a member on the network.

Contents

Fabric

Attributes of Hyperledger Fabric for a member on the network.

Type: [MemberFabricAttributes \(p. 43\)](#) 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](#)

MemberFrameworkConfiguration

Configuration for a specific blockchain framework for a member on the network.

Contents

Fabric

Attributes of Hyperledger Fabric for a member on the network.

Type: [MemberFabricConfiguration \(p. 44\)](#) 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](#)

MemberSummary

A summary of configuration properties of the member.

Contents

CreationDate

The date and time that the member was created.

Type: Timestamp

Required: No

Description

An optional description of the member.

Type: String

Length Constraints: Maximum length of 128.

Required: No

Id

The unique ID of the member.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

IsOwned

An indicator of whether the member is owned by the active AWS account or by a different AWS account.

Type: Boolean

Required: No

Name

The name of the member.

Type: String

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

Pattern: .*\.S.*

Required: No

NetworkId

The unique ID of the network to which the member belongs.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Status

The status of the network membership.

Type: String

Valid Values: `CREATING` | `ACTIVE` | `FAILED` | `DELETING` | `DELETED`

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](#)

Network

Network configuration properties.

Contents

CreationDate

The date and time that the network was created.

Type: Timestamp

Required: No

Description

Attributes of the blockchain framework for the network.

Type: String

Length Constraints: Maximum length of 128.

Required: No

Framework

The blockchain framework that the network uses.

Type: String

Valid Values: `HYPERLEDGER_FABRIC`

Required: No

FrameworkAttributes

Attributes of the blockchain framework being used.

Type: [NetworkFrameworkAttributes](#) (p. 53) object

Required: No

FrameworkVersion

The version of the blockchain framework that the network uses.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8.

Required: No

Id

The unique identifier of the network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Name

The name of the network.

Type: String

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

Pattern: `.*\S.*`

Required: No

Status

The current status of the network.

Type: String

Valid Values: `CREATING` | `ACTIVE` | `FAILED` | `DELETING` | `DELETED`

Required: No

StatusReason

The reason that the network is in its current status.

Type: String

Required: No

VpcEndpointServiceName

The VPC endpoint service name of the VPC endpoint service of the network. Members use the VPC endpoint service name to create a VPC endpoint to access network resources.

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](#)

NetworkConfiguration

Configuration properties of the network.

Contents

Description

An optional description for the network.

Type: String

Length Constraints: Maximum length of 128.

Required: No

Framework

The blockchain framework that the network uses.

Type: String

Valid Values: `HYPERLEDGER_FABRIC`

Required: Yes

FrameworkVersion

The version of the blockchain framework that the network uses.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8.

Required: Yes

Name

The name of the network.

Type: String

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

Pattern: `.*\S.*`

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](#)

NetworkFabricAttributes

Attributes of Hyperledger Fabric for a network.

Contents

OrderingServiceEndpoint

The endpoint of the ordering service for the network.

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](#)

NetworkFrameworkAttributes

Attributes for a specific blockchain framework for a member on the network.

Contents

Fabric

Attributes of Hyperledger Fabric for a member on the network.

Type: [NetworkFabricAttributes](#) (p. 52) 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](#)

NetworkSummary

A summary of network configuration details.

Contents

CreationDate

The date and time that the network was created.

Type: Timestamp

Required: No

Description

An optional description of the network.

Type: String

Length Constraints: Maximum length of 128.

Required: No

Framework

The blockchain framework used by the network.

Type: String

Valid Values: `HYPERLEDGER_FABRIC`

Required: No

FrameworkVersion

The version of the blockchain framework used by the network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 8.

Required: No

Id

The unique identifier of the network.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Name

The name of the network.

Type: String

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

Pattern: `.*\S.*`

Required: No

Status

The current status of the network.

Type: String

Valid Values: `CREATING` | `ACTIVE` | `FAILED` | `DELETING` | `DELETED`

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](#)

Node

A node configuration.

Contents

AvailabilityZone

The Availability Zone in which the node exists.

Type: String

Required: No

CreationDate

The date and time that the node was created.

Type: Timestamp

Required: No

DataVolumeSize

The size of the storage volume on the peer node.

Type: Integer

Valid Range: Minimum value of 10. Maximum value of 30.

Required: No

Endpoint

The endpoint used to communicate with the node on the network.

Type: String

Required: No

FrameworkAttributes

Attributes of the blockchain framework being used.

Type: [NodeFrameworkAttributes \(p. 60\)](#) object

Required: No

Id

The unique identifier of the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

InstanceType

The instance type of the node.

Type: String

Required: No

MemberId

The unique identifier of the member that owns the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

NetworkId

The unique identifier of the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Status

The status of the node.

Type: String

Valid Values: CREATING | HEALTHY | UNHEALTHY | FAILED | DELETING | DELETED

Required: No

StatusReason

The reason for the node status.

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](#)

NodeConfiguration

Configuration properties of the node.

Contents

AvailabilityZone

The Availability Zone in which the node exists.

Type: String

Required: Yes

DataVolumeSize

The size of the storage volume on the peer node.

Type: Integer

Valid Range: Minimum value of 10. Maximum value of 30.

Required: No

InstanceType

The instance type of the node.

Type: String

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](#)

NodeFabricAttributes

Attributes of Hyperledger Fabric for a peer node.

Contents

PeerEventPort

The port on which this node listens for peer requests, such as endorsement requests, from other nodes on the network.

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](#)

NodeFrameworkAttributes

Attributes for a specific blockchain framework for a node.

Contents

Fabric

Attributes of Hyperledger Fabric for a peer node.

Type: [NodeFabricAttributes \(p. 59\)](#) 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](#)

NodeSummary

A summary of configuration properties for the node.

Contents

AvailabilityZone

The Availability Zone in which the EC2 instance for the node was launched.

Type: String

Required: No

CreationDate

The date and time that the node was created.

Type: Timestamp

Required: No

Endpoint

The endpoint used to communicate with the node on the network.

Type: String

Required: No

Id

The unique identifier of the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

InstanceType

The EC2 instance type for the node.

Type: String

Required: No

MemberId

The unique identifier of the member that owns the node.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

NetworkId

The unique identifier of the network to which the node belongs.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: No

Status

The status of the node.

Type: String

Valid Values: CREATING | HEALTHY | UNHEALTHY | FAILED | DELETING | DELETED

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