aws

AWS SimSpace Weaver

API Version 2022-10-28

AWS SimSpace Weaver: API Reference

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Welcome

AWS SimSpace Weaver (SimSpace Weaver) is a service that you can use to build and run large-scale spatial simulations in the AWS Cloud. For example, you can create crowd simulations, large real-world environments, and immersive and interactive experiences. For more information about SimSpace Weaver, see the *AWS SimSpace Weaver User Guide* .

This API reference describes the API operations and data types that you can use to communicate directly with SimSpace Weaver.

SimSpace Weaver also provides the SimSpace Weaver app SDK, which you use for app development. The SimSpace Weaver app SDK API reference is included in the SimSpace Weaver app SDK documentation. This documentation is part of the SimSpace Weaver app SDK distributable package.

This document was last published on July 2, 2024.

Actions

The following actions are supported:

- [CreateSnapshot](#)
- [DeleteApp](#)
- [DeleteSimulation](#)
- [DescribeApp](#)
- [DescribeSimulation](#)
- [ListApps](#)
- [ListSimulations](#)
- [ListTagsForResource](#)
- [StartApp](#)
- [StartClock](#)
- [StartSimulation](#)
- [StopApp](#)
- [StopClock](#)
- [StopSimulation](#)
- [TagResource](#)
- [UntagResource](#)

CreateSnapshot

Creates a snapshot of the specified simulation. A snapshot is a file that contains simulation state data at a specific time. The state data saved in a snapshot includes entity data from the State Fabric, the simulation configuration specified in the schema, and the clock tick number. You can use the snapshot to initialize a new simulation. For more information about snapshots, see [Snapshots](#) in the *AWS SimSpace Weaver User Guide*.

You specify a `Destination` when you create a snapshot. The `Destination` is the name of an Amazon S3 bucket and an optional `ObjectKeyPrefix`. The `ObjectKeyPrefix` is usually the name of a folder in the bucket. SimSpace Weaver creates a `snapshot` folder inside the `Destination` and places the snapshot file there.

The snapshot file is an Amazon S3 object. It has an object key with the form: *object-key-prefix*`/`snapshot`/`*simulation-name-YYMMdd-HHmm-ss*`.`zip, where:

- *YY* is the 2-digit year
- *MM* is the 2-digit month
- *dd* is the 2-digit day of the month
- *HH* is the 2-digit hour (24-hour clock)
- *mm* is the 2-digit minutes
- *ss* is the 2-digit seconds

Request Syntax

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

{
    "Destination": {
        "BucketName": "string",
        "ObjectKeyPrefix": "string"
    },
    "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Destination

> The Amazon S3 bucket and optional folder (object key prefix) where SimSpace Weaver creates the snapshot file.
>
> The Amazon S3 bucket must be in the same AWS Region as the simulation.
>
> Type: S3Destination object
>
> Required: Yes

Simulation

> The name of the simulation.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 64.
>
> Pattern: `^[a-zA-Z0-9_.-]+$`
>
> 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.

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteApp

Deletes the instance of the given custom app.

Request Syntax

```
DELETE /deleteapp?app=App&domain=Domain&simulation=Simulation HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

App

The name of the app.

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

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

Required: Yes

Domain

The name of the domain of the app.

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

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

Required: Yes

Simulation

The name of the simulation of the app.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

DeleteSimulation

Deletes all SimSpace Weaver resources assigned to the given simulation.

> **ⓘ Note**
>
> Your simulation uses resources in other AWS services. This API operation doesn't delete resources in other AWS services.

Request Syntax

```
DELETE /deletesimulation?simulation=Simulation HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Simulation

The name of the simulation.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for PHP V3
- AWS SDK for Python

- [AWS SDK for Ruby V3](#)

DescribeApp

Returns the state of the given custom app.

Request Syntax

```
GET /describeapp?app=App&domain=Domain&simulation=Simulation HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

App

The name of the app.

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

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

Required: Yes

Domain

The name of the domain of the app.

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

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

Required: Yes

Simulation

The name of the simulation of the app.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Description": "string",
   "Domain": "string",
   "EndpointInfo": {
      "Address": "string",
      "IngressPortMappings": [
         {
            "Actual": number,
            "Declared": number
         }
      ]
   },
   "LaunchOverrides": {
      "LaunchCommands": [ "string" ]
   },
   "Name": "string",
   "Simulation": "string",
   "Status": "string",
   "TargetStatus": "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.

Description

The description of the app.

Type: String

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

Domain

The name of the domain of the app.

Type: String

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

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

EndpointInfo

Information about the network endpoint for the custom app. You can use the endpoint to connect to the custom app.

Type: SimulationAppEndpointInfo object

LaunchOverrides

Options that apply when the app starts. These options override default behavior.

Type: LaunchOverrides object

Name

The name of the app.

Type: String

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

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

Simulation

The name of the simulation of the app.

Type: String

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

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

Status

The current lifecycle state of the custom app.

Type: String

Valid Values: STARTING | STARTED | STOPPING | STOPPED | ERROR | UNKNOWN

TargetStatus

The desired lifecycle state of the custom app.

Type: String

Valid Values: UNKNOWN | STARTED | STOPPED

Errors

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

AccessDeniedException

HTTP Status Code: 403

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

DescribeSimulation

Returns the current state of the given simulation.

Request Syntax

```
GET /describesimulation?simulation=Simulation HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Simulation

The name of the simulation.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Arn": "string",
   "CreationTime": number,
   "Description": "string",
   "ExecutionId": "string",
   "LiveSimulationState": {
      "Clocks": [
         {
```

```
                "Status": "string",
                "TargetStatus": "string"
            }
        ],
        "Domains": [
            {
                "Lifecycle": "string",
                "Name": "string"
            }
        ]
    },
    "LoggingConfiguration": {
        "Destinations": [
            {
                "CloudWatchLogsLogGroup": {
                    "LogGroupArn": "string"
                }
            }
        ]
    },
    "MaximumDuration": "string",
    "Name": "string",
    "RoleArn": "string",
    "SchemaError": "string",
    "SchemaS3Location": {
        "BucketName": "string",
        "ObjectKey": "string"
    },
    "SnapshotS3Location": {
        "BucketName": "string",
        "ObjectKey": "string"
    },
    "StartError": "string",
    "Status": "string",
    "TargetStatus": "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.

Arn

The Amazon Resource Name (ARN) of the simulation. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-`
`\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

CreationTime

The time when the simulation was created, expressed as the number of seconds and milliseconds in UTC since the Unix epoch (0:0:0.000, January 1, 1970).

Type: Timestamp

Description

The description of the simulation.

Type: String

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

ExecutionId

A universally unique identifier (UUID) for this simulation.

Type: String

Length Constraints: Minimum length of 36.

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

LiveSimulationState

A collection of additional state information, such as domain and clock configuration.

Type: LiveSimulationState object

LoggingConfiguration

Settings that control how SimSpace Weaver handles your simulation log data.

Type: [LoggingConfiguration](#) object

MaximumDuration

The maximum running time of the simulation, specified as a number of minutes (m or M), hours (h or H), or days (d or D). The simulation stops when it reaches this limit. The maximum value is 14D, or its equivalent in the other units. The default value is 14D. A value equivalent to 0 makes the simulation immediately transition to `Stopping` as soon as it reaches `Started`.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 6.

Pattern: `^\d{1,5}[mhdMHD]$`

Name

The name of the simulation.

Type: String

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

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

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that the simulation assumes to perform actions. For more information about ARNs, see [Amazon Resource Names (ARNs)](#) in the *AWS General Reference*. For more information about IAM roles, see [IAM roles](#) in the *AWS Identity and Access Management User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):iam::(\d{12})?:role\/(.+)$`

SchemaError

This parameter has been deprecated.

An error message that SimSpace Weaver returns only if there is a problem with the simulation schema.

Type: String

SchemaS3Location

The location of the simulation schema in Amazon Simple Storage Service (Amazon S3). For more information about Amazon S3, see the *Amazon Simple Storage Service User Guide*.

Type: S3Location object

SnapshotS3Location

A location in Amazon Simple Storage Service (Amazon S3) where SimSpace Weaver stores simulation data, such as your app .zip files and schema file. For more information about Amazon S3, see the *Amazon Simple Storage Service User Guide*.

Type: S3Location object

StartError

An error message that SimSpace Weaver returns only if a problem occurs when the simulation is in the STARTING state.

Type: String

Status

The current lifecycle state of the simulation.

Type: String

Valid Values: UNKNOWN | STARTING | STARTED | STOPPING | STOPPED | FAILED | DELETING | DELETED | SNAPSHOT_IN_PROGRESS

TargetStatus

The desired lifecycle state of the simulation.

Type: String

Valid Values: UNKNOWN | STARTED | STOPPED | DELETED

Errors

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

AccessDeniedException

HTTP Status Code: 403

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

ListApps

Lists all custom apps or service apps for the given simulation and domain.

Request Syntax

```
GET /listapps?
domain=Domain&maxResults=MaxResults&nextToken=NextToken&simulation=Simulation HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

Domain

The name of the domain that you want to list apps for.

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

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

MaxResults

The maximum number of apps to list.

Valid Range: Minimum value of 1.

NextToken

If SimSpace Weaver returns nextToken, then there are more results available. The value of
nextToken is a unique pagination token for each page. To retrieve the next page, call the
operation again using the returned token. Keep all other arguments unchanged. If no results
remain, then nextToken is set to null. Each pagination token expires after 24 hours. If you
provide a token that isn't valid, then you receive an *HTTP 400 ValidationException* error.

Simulation

The name of the simulation that you want to list apps for.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "Apps": [
      {
         "Domain": "string",
         "Name": "string",
         "Simulation": "string",
         "Status": "string",
         "TargetStatus": "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.

Apps

The list of apps for the given simulation and domain.

Type: Array of SimulationAppMetadata objects

NextToken

If SimSpace Weaver returns `nextToken`, then there are more results available. The value of `nextToken` is a unique pagination token for each page. To retrieve the next page, call the operation again using the returned token. Keep all other arguments unchanged. If no results

remain, then `nextToken` is set to `null`. Each pagination token expires after 24 hours. If you provide a token that isn't valid, then you receive an *HTTP 400 ValidationException* error.

Type: String

Errors

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

AccessDeniedException

HTTP Status Code: 403

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

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

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

ListSimulations

Lists the SimSpace Weaver simulations in the AWS account used to make the API call.

Request Syntax

```
GET /listsimulations?maxResults=MaxResults&nextToken=NextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

MaxResults

The maximum number of simulations to list.

Valid Range: Minimum value of 1.

NextToken

If SimSpace Weaver returns `nextToken`, then there are more results available. The value of `nextToken` is a unique pagination token for each page. To retrieve the next page, call the operation again using the returned token. Keep all other arguments unchanged. If no results remain, then `nextToken` is set to `null`. Each pagination token expires after 24 hours. If you provide a token that isn't valid, then you receive an *HTTP 400 ValidationException* error.

Request Body

The request does not have a request body.

Response Syntax

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

{
   "NextToken": "string",
   "Simulations": [
      {
         "Arn": "string",
```

```
            "CreationTime": number,
            "Name": "string",
            "Status": "string",
            "TargetStatus": "string"
        }
    ]
}
```

Response Elements

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

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

NextToken

If SimSpace Weaver returns `nextToken`, then there are more results available. The value of `nextToken` is a unique pagination token for each page. To retrieve the next page, call the operation again using the returned token. Keep all other arguments unchanged. If no results remain, then `nextToken` is set to `null`. Each pagination token expires after 24 hours. If you provide a token that isn't valid, then you receive an *HTTP 400 ValidationException* error.

Type: String

Simulations

The list of simulations.

Type: Array of SimulationMetadata objects

Errors

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

AccessDeniedException

HTTP Status Code: 403

InternalServerException

HTTP Status Code: 500

ValidationException

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

ListTagsForResource

Lists all tags on a SimSpace Weaver resource.

Request Syntax

```
GET /tags/ResourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the resource. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

Response Elements

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

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

Tags

   The list of tags for the resource.

   Type: String to string map

   Map Entries: Maximum number of 50 items.

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

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

Errors

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

ResourceNotFoundException

   HTTP Status Code: 404

ValidationException

   HTTP Status Code: 400

See Also

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

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

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

StartApp

Starts a custom app with the configuration specified in the simulation schema.

Request Syntax

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

{
   "ClientToken": "string",
   "Description": "string",
   "Domain": "string",
   "LaunchOverrides": {
      "LaunchCommands": [ "string" ]
   },
   "Name": "string",
   "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

ClientToken

A value that you provide to ensure that repeated calls to this API operation using the same parameters complete only once. A ClientToken is also known as an *idempotency token*. A ClientToken expires after 24 hours.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 128.

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

Required: No

Description

The description of the app.

Type: String

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

Required: No

Domain

The name of the domain of the app.

Type: String

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

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

Required: Yes

LaunchOverrides

Options that apply when the app starts. These options override default behavior.

Type: LaunchOverrides object

Required: No

Name

The name of the app.

Type: String

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

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

Required: Yes

Simulation

The name of the simulation of the app.

Type: String

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

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

Required: Yes

Response Syntax

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

{
   "Domain": "string",
   "Name": "string",
   "Simulation": "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.

Domain

The name of the domain of the app.

Type: String

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

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

Name

The name of the app.

Type: String

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

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

Simulation

The name of the simulation of the app.

Type: String

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

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

Errors

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

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ServiceQuotaExceededException

HTTP Status Code: 402

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StartClock

Starts the simulation clock.

Request Syntax

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

{
    "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Simulation

The name of the simulation.

Type: String

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

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

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.

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

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- AWS SDK for Go v2
- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for PHP V3
- AWS SDK for Python

- [AWS SDK for Ruby V3](#)

StartSimulation

Starts a simulation with the given name. You must choose to start your simulation from a schema or from a snapshot. For more information about the schema, see the schema reference in the *AWS SimSpace Weaver User Guide*. For more information about snapshots, see Snapshots in the *AWS SimSpace Weaver User Guide*.

Request Syntax

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

{
    "ClientToken": "string",
    "Description": "string",
    "MaximumDuration": "string",
    "Name": "string",
    "RoleArn": "string",
    "SchemaS3Location": {
        "BucketName": "string",
        "ObjectKey": "string"
    },
    "SnapshotS3Location": {
        "BucketName": "string",
        "ObjectKey": "string"
    },
    "Tags": {
        "string" : "string"
    }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

ClientToken

A value that you provide to ensure that repeated calls to this API operation using the same parameters complete only once. A `ClientToken` is also known as an *idempotency token*. A `ClientToken` expires after 24 hours.

Type: String

Length Constraints: Minimum length of 32. Maximum length of 128.

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

Required: No

Description

The description of the simulation.

Type: String

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

Required: No

MaximumDuration

The maximum running time of the simulation, specified as a number of minutes (m or M), hours (h or H), or days (d or D). The simulation stops when it reaches this limit. The maximum value is 14D, or its equivalent in the other units. The default value is 14D. A value equivalent to 0 makes the simulation immediately transition to `Stopping` as soon as it reaches `Started`.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 6.

Pattern: `^\d{1,5}[mhdMHD]$`

Required: No

Name

The name of the simulation.

Type: String

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

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

Required: Yes

RoleArn

The Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role that the simulation assumes to perform actions. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*. For more information about IAM roles, see IAM roles in the *AWS Identity and Access Management User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):iam::(\d{12})?:role\/(.+)$`

Required: Yes

SchemaS3Location

The location of the simulation schema in Amazon Simple Storage Service (Amazon S3). For more information about Amazon S3, see the *Amazon Simple Storage Service User Guide*.

Provide a `SchemaS3Location` to start your simulation from a schema.

If you provide a `SchemaS3Location` then you can't provide a `SnapshotS3Location`.

Type: S3Location object

Required: No

SnapshotS3Location

The location of the snapshot .zip file in Amazon Simple Storage Service (Amazon S3). For more information about Amazon S3, see the *Amazon Simple Storage Service User Guide*.

Provide a `SnapshotS3Location` to start your simulation from a snapshot.

The Amazon S3 bucket must be in the same AWS Region as the simulation.

If you provide a `SnapshotS3Location` then you can't provide a `SchemaS3Location`.

Type: S3Location object

Required: No

Tags

A list of tags for the simulation. For more information about tags, see Tagging AWS resources in the *AWS General Reference.*

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

Required: No

Response Syntax

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

{
    "Arn": "string",
    "CreationTime": number,
    "ExecutionId": "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.

Arn

The Amazon Resource Name (ARN) of the simulation. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-`
`\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

CreationTime

The time when the simulation was created, expressed as the number of seconds and milliseconds in UTC since the Unix epoch (0:0:0.000, January 1, 1970).

Type: Timestamp

ExecutionId

A universally unique identifier (UUID) for this simulation.

Type: String

Length Constraints: Minimum length of 36.

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

Errors

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

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ServiceQuotaExceededException

HTTP Status Code: 402

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StopApp

Stops the given custom app and shuts down all of its allocated compute resources.

Request Syntax

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

{
    "App": "string",
    "Domain": "string",
    "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

App

The name of the app.

Type: String

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

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

Required: Yes

Domain

The name of the domain of the app.

Type: String

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

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

Required: Yes

Simulation

The name of the simulation of the app.

Type: String

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

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

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.

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StopClock

Stops the simulation clock.

Request Syntax

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

{
    "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Simulation

The name of the simulation.

Type: String

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

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

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.

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

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

- [AWS SDK for Ruby V3](#)

StopSimulation

Stops the given simulation.

> ⚠️ **Important**
>
> You can't restart a simulation after you stop it. If you want to restart a simulation, then you must stop it, delete it, and start a new instance of it.

Request Syntax

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

{
    "Simulation": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

Simulation

The name of the simulation.

Type: String

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

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

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](#).

AccessDeniedException

HTTP Status Code: 403

ConflictException

HTTP Status Code: 409

InternalServerException

HTTP Status Code: 500

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

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

- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

TagResource

Adds tags to a SimSpace Weaver resource. For more information about tags, see Tagging AWS resources in the *AWS General Reference*.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the resource that you want to add tags to. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

Tags

A list of tags to apply to the resource.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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](#).

ResourceNotFoundException

HTTP Status Code: 404

TooManyTagsException

HTTP Status Code: 400

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UntagResource

Removes tags from a SimSpace Weaver resource. For more information about tags, see Tagging AWS resources in the *AWS General Reference*.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

ResourceArn

The Amazon Resource Name (ARN) of the resource that you want to remove tags from. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*.

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

Required: Yes

TagKeys

A list of tag keys to remove from the resource.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

ResourceNotFoundException

HTTP Status Code: 404

ValidationException

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Data Types

The AWS SimSpace Weaver 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:

- CloudWatchLogsLogGroup
- Domain
- LaunchOverrides
- LiveSimulationState
- LogDestination
- LoggingConfiguration
- S3Destination
- S3Location
- SimulationAppEndpointInfo
- SimulationAppMetadata
- SimulationAppPortMapping
- SimulationClock
- SimulationMetadata

CloudWatchLogsLogGroup

The Amazon CloudWatch Logs log group for the simulation. For more information about log groups, see Working with log groups and log streams in the *Amazon CloudWatch Logs User Guide*.

Contents

LogGroupArn

The Amazon Resource Name (ARN) of the Amazon CloudWatch Logs log group for the simulation. For more information about ARNs, see Amazon Resource Names (ARNs) in the *AWS General Reference*. For more information about log groups, see Working with log groups and log streams in the *Amazon CloudWatch Logs User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):log-group:([a-z]{2}-[a-z]+-\d{1}):(\d{12})?:role\/(.+)$`

Required: No

See Also

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

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

Domain

A collection of app instances that run the same executable app code and have the same launch options and commands.

For more information about domains, see [Key concepts: Domains](#) in the *AWS SimSpace Weaver User Guide*.

Contents

Lifecycle

The type of lifecycle management for apps in the domain. Indicates whether apps in this domain are *managed* (SimSpace Weaver starts and stops the apps) or *unmanaged* (you must start and stop the apps).

Lifecycle types

- `PerWorker` – Managed: SimSpace Weaver starts one app on each worker.
- `BySpatialSubdivision` – Managed: SimSpace Weaver starts one app for each spatial partition.
- `ByRequest` – Unmanaged: You use the `StartApp` API to start the apps and use the `StopApp` API to stop the apps.

Type: String

Valid Values: `Unknown | PerWorker | BySpatialSubdivision | ByRequest`

Required: No

Name

The name of the domain.

Type: String

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

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

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

LaunchOverrides

Options that apply when the app starts. These options override default behavior.

Contents

LaunchCommands

App launch commands and command line parameters that override the launch command configured in the simulation schema.

Type: Array of strings

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

LiveSimulationState

A collection of additional state information, such as domain and clock configuration.

Contents

Clocks

A list of simulation clocks.

> **ⓘ Note**
>
> At this time, a simulation has only one clock.

Type: Array of [SimulationClock](#) objects

Required: No

Domains

A list of domains for the simulation. For more information about domains, see [Key concepts: Domains](#) in the *AWS SimSpace Weaver User Guide*.

Type: Array of [Domain](#) objects

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

LogDestination

The location where SimSpace Weaver sends simulation log data.

Contents

CloudWatchLogsLogGroup

An Amazon CloudWatch Logs log group that stores simulation log data. For more information about log groups, see Working with log groups and log streams in the *Amazon CloudWatch Logs User Guide*.

Type: CloudWatchLogsLogGroup object

Required: No

See Also

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

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

LoggingConfiguration

The logging configuration for a simulation.

Contents

Destinations

A list of the locations where SimSpace Weaver sends simulation log data.

Type: Array of [LogDestination](#) objects

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

S3Destination

An Amazon S3 bucket and optional folder (object key prefix) where SimSpace Weaver creates a file.

Contents

BucketName

The name of an Amazon S3 bucket. For more information about buckets, see Creating, configuring, and working with Amazon S3 buckets in the *Amazon Simple Storage Service User Guide*.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Required: Yes

ObjectKeyPrefix

A string prefix for an Amazon S3 object key. It's usually a folder name. For more information about folders in Amazon S3, see Organizing objects in the Amazon S3 console using folders in the *Amazon Simple Storage Service User Guide*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

See Also

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

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

S3Location

A location in Amazon Simple Storage Service (Amazon S3) where SimSpace Weaver stores simulation data, such as your app .zip files and schema file. For more information about Amazon S3, see the *Amazon Simple Storage Service User Guide*.

Contents

BucketName

The name of an Amazon S3 bucket. For more information about buckets, see Creating, configuring, and working with Amazon S3 buckets in the *Amazon Simple Storage Service User Guide*.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Required: Yes

ObjectKey

The key name of an object in Amazon S3. For more information about Amazon S3 objects and object keys, see Uploading, downloading, and working with objects in Amazon S3 in the *Amazon Simple Storage Service User Guide*.

Type: String

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

Required: Yes

See Also

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

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

SimulationAppEndpointInfo

Information about the network endpoint that you can use to connect to your custom or service app. For more information about SimSpace Weaver apps, see [Key concepts: Apps](#) in the *AWS SimSpace Weaver User Guide.*.

Contents

Address

The IP address of the app. SimSpace Weaver dynamically assigns this IP address when the app starts.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1600.

Required: No

IngressPortMappings

The inbound TCP/UDP port numbers of the app. The combination of an IP address and a port number form a network endpoint.

Type: Array of [SimulationAppPortMapping](#) objects

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SimulationAppMetadata

A collection of metadata about the app.

Contents

Domain

The domain of the app. For more information about domains, see [Key concepts: Domains](#) in the *AWS SimSpace Weaver User Guide*.

Type: String

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

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

Required: No

Name

The name of the app.

Type: String

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

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

Required: No

Simulation

The name of the simulation of the app.

Type: String

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

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

Required: No

Status

The current status of the app.

Type: String

Valid Values: `STARTING | STARTED | STOPPING | STOPPED | ERROR | UNKNOWN`

Required: No

TargetStatus

The desired status of the app.

Type: String

Valid Values: `UNKNOWN | STARTED | STOPPED`

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SimulationAppPortMapping

A collection of TCP/UDP ports for a custom or service app.

Contents

Actual

The TCP/UDP port number of the running app. SimSpace Weaver dynamically assigns this port number when the app starts. SimSpace Weaver maps the `Declared` port to the `Actual` port. Clients connect to the app using the app's IP address and the `Actual` port number.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

Declared

The TCP/UDP port number of the app, declared in the simulation schema. SimSpace Weaver maps the `Declared` port to the `Actual` port. The source code for the app should bind to the `Declared` port.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 65535.

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SimulationClock

Status information about the simulation clock.

Contents

Status

The current status of the simulation clock.

Type: String

Valid Values: UNKNOWN | STARTING | STARTED | STOPPING | STOPPED

Required: No

TargetStatus

The desired status of the simulation clock.

Type: String

Valid Values: UNKNOWN | STARTED | STOPPED

Required: No

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SimulationMetadata

A collection of data about the simulation.

Contents

Arn

The Amazon Resource Name (ARN) of the simulation. For more information about ARNs, see [Amazon Resource Names (ARNs)](#) in the *AWS General Reference*.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1600.

Pattern: `^arn:(?:aws|aws-cn|aws-us-gov):simspaceweaver:([a-z]{2}-[a-z]+-`
`\d{1}):(\d{12})?:([a-z]+)\/(.+)$`

Required: No

CreationTime

The time when the simulation was created, expressed as the number of seconds and milliseconds in UTC since the Unix epoch (0:0:0.000, January 1, 1970).

Type: Timestamp

Required: No

Name

The name of the simulation.

Type: String

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

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

Required: No

Status

The current status of the simulation.

Type: String

Valid Values: `UNKNOWN | STARTING | STARTED | STOPPING | STOPPED | FAILED | DELETING | DELETED | SNAPSHOT_IN_PROGRESS`

Required: No

TargetStatus

The desired status of the simulation.

Type: String

Valid Values: `UNKNOWN | STARTED | STOPPED | 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

Common Parameters

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

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 Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Elements of an AWS API request signature in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see AWS services that work with IAM in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

Common 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: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 403

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

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

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

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

UnrecognizedClientException

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

UnknownOperationException

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 404

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400