aws

AWS Ground Station

API Version 2019-05-23

AWS Ground Station: API Reference

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Welcome

Welcome to the AWS Ground Station API Reference. AWS Ground Station is a fully managed service that enables you to control satellite communications, downlink and process satellite data, and scale your satellite operations efficiently and cost-effectively without having to build or manage your own ground station infrastructure.

This document was last published on July 2, 2024.

Actions

The following actions are supported:

- CancelContact
- CreateConfig
- CreateDataflowEndpointGroup
- CreateEphemeris
- CreateMissionProfile
- DeleteConfig
- DeleteDataflowEndpointGroup
- DeleteEphemeris
- DeleteMissionProfile
- DescribeContact
- DescribeEphemeris
- GetAgentConfiguration
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- GetDataflowEndpointGroup
- GetMinuteUsage
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- ListConfigs
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- ListEphemerides
- ListGroundStations
- ListMissionProfiles
- ListSatellites
- ListTagsForResource
- RegisterAgent
- ReserveContact

- [TagResource](#)
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- [UpdateAgentStatus](#)
- [UpdateConfig](#)
- [UpdateEphemeris](#)
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CancelContact

Cancels a contact with a specified contact ID.

Request Syntax

```
DELETE /contact/contactId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "contactId": "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.

contactId

UUID of a contact.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

CreateConfig

Creates a `Config` with the specified `configData` parameters.

Only one type of `configData` can be specified.

Request Syntax

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

{
   "configData": { ... },
   "name": "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.

configData

Parameters of a `Config`.

Type: ConfigTypeData object

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

Required: Yes

name

Name of a `Config`.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: Yes

tags

Tags assigned to a `Config`.

Type: String to string map

Required: No

Response Syntax

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

{
    "configArn": "string",
    "configId": "string",
    "configType": "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.

configArn

ARN of a `Config`.

Type: String

configId

UUID of a `Config`.

Type: String

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceLimitExceededException

Account limits for this resource have been exceeded.

HTTP Status Code: 429

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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- AWS Command Line Interface

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- [AWS SDK for Go v2](#)

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CreateDataflowEndpointGroup

Creates a `DataflowEndpoint` group containing the specified list of `DataflowEndpoint` objects.

The `name` field in each endpoint is used in your mission profile `DataflowEndpointConfig` to specify which endpoints to use during a contact.

When a contact uses multiple `DataflowEndpointConfig` objects, each `Config` must match a `DataflowEndpoint` in the same group.

Request Syntax

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

{
    "contactPostPassDurationSeconds": number,
    "contactPrePassDurationSeconds": number,
    "endpointDetails": [
        {
            "awsGroundStationAgentEndpoint": {
                "agentStatus": "string",
                "auditResults": "string",
                "egressAddress": {
                    "mtu": number,
                    "socketAddress": {
                        "name": "string",
                        "port": number
                    }
                },
                "ingressAddress": {
                    "mtu": number,
                    "socketAddress": {
                        "name": "string",
                        "portRange": {
                            "maximum": number,
                            "minimum": number
                        }
                    }
                },
                "name": "string"
            },
```

```
            "endpoint": {
                "address": {
                    "name": "string",
                    "port": number
                },
                "mtu": number,
                "name": "string",
                "status": "string"
            },
            "healthReasons": [ "string" ],
            "healthStatus": "string",
            "securityDetails": {
                "roleArn": "string",
                "securityGroupIds": [ "string" ],
                "subnetIds": [ "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.

contactPostPassDurationSeconds

Amount of time, in seconds, after a contact ends that the Ground Station Dataflow Endpoint Group will be in a POSTPASS state. A Ground Station Dataflow Endpoint Group State Change event will be emitted when the Dataflow Endpoint Group enters and exits the POSTPASS state.

Type: Integer

Valid Range: Minimum value of 120. Maximum value of 480.

Required: No

contactPrePassDurationSeconds

Amount of time, in seconds, before a contact starts that the Ground Station Dataflow Endpoint Group will be in a PREPASS state. A Ground Station Dataflow Endpoint Group State Change event will be emitted when the Dataflow Endpoint Group enters and exits the PREPASS state.

Type: Integer

Valid Range: Minimum value of 120. Maximum value of 480.

Required: No

endpointDetails

Endpoint details of each endpoint in the dataflow endpoint group.

Type: Array of EndpointDetails objects

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Required: Yes

tags

Tags of a dataflow endpoint group.

Type: String to string map

Required: No

Response Syntax

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

{
    "dataflowEndpointGroupId": "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.

dataflowEndpointGroupId

> UUID of a dataflow endpoint group.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 128.
>
> 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.

DependencyException

> Dependency encountered an error.
>
> HTTP Status Code: 531

InvalidParameterException

> One or more parameters are not valid.
>
> HTTP Status Code: 431

ResourceNotFoundException

> Resource was not found.
>
> HTTP Status Code: 434

See Also

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- [AWS SDK for Ruby V3](#)

CreateEphemeris

Creates an Ephemeris with the specified `EphemerisData`.

Request Syntax

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

{
   "enabled": boolean,
   "ephemeris": { ... },
   "expirationTime": number,
   "kmsKeyArn": "string",
   "name": "string",
   "priority": number,
   "satelliteId": "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.

enabled

Whether to set the ephemeris status to `ENABLED` after validation.

Setting this to false will set the ephemeris status to `DISABLED` after validation.

Type: Boolean

Required: No

ephemeris

Ephemeris data.

Type: [EphemerisData](#) object

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

Required: No

expirationTime

An overall expiration time for the ephemeris in UTC, after which it will become EXPIRED.

Type: Timestamp

Required: No

kmsKeyArn

The ARN of a KMS key used to encrypt the ephemeris in Ground Station.

Type: String

Required: No

name

A name string associated with the ephemeris. Used as a human-readable identifier for the ephemeris.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: Yes

priority

Customer-provided priority score to establish the order in which overlapping ephemerides should be used.

The default for customer-provided ephemeris priority is 1, and higher numbers take precedence.

Priority must be 1 or greater

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 99999.

Required: No

satelliteId

AWS Ground Station satellite ID for this ephemeris.

Type: String

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

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

Required: Yes

tags

Tags assigned to an ephemeris.

Type: String to string map

Required: No

Response Syntax

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

{
    "ephemerisId": "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.

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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- AWS SDK for PHP V3

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

CreateMissionProfile

Creates a mission profile.

`dataflowEdges` is a list of lists of strings. Each lower level list of strings has two elements: a *from* ARN and a *to* ARN.

Request Syntax

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

{
   "contactPostPassDurationSeconds": number,
   "contactPrePassDurationSeconds": number,
   "dataflowEdges": [
      [ "string" ]
   ],
   "minimumViableContactDurationSeconds": number,
   "name": "string",
   "streamsKmsKey": { ... },
   "streamsKmsRole": "string",
   "tags": {
      "string" : "string"
   },
   "trackingConfigArn": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

contactPostPassDurationSeconds

Amount of time after a contact ends that you'd like to receive a Ground Station Contact State Change event indicating the pass has finished.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

Required: No

contactPrePassDurationSeconds

Amount of time prior to contact start you'd like to receive a Ground Station Contact State Change event indicating an upcoming pass.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

Required: No

dataflowEdges

A list of lists of ARNs. Each list of ARNs is an edge, with a *from* `Config` and a *to* `Config`.

Type: Array of arrays of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Array Members: Fixed number of 2 items.

Required: Yes

minimumViableContactDurationSeconds

Smallest amount of time in seconds that you'd like to see for an available contact. AWS Ground Station will not present you with contacts shorter than this duration.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 21600.

Required: Yes

name

Name of a mission profile.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: Yes

streamsKmsKey

KMS key to use for encrypting streams.

Type: KmsKey object

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

Required: No

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

Required: No

tags

Tags assigned to a mission profile.

Type: String to string map

Required: No

trackingConfigArn

ARN of a tracking `Config`.

Type: String

Required: Yes

Response Syntax

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


{
    "missionProfileId": "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.

missionProfileId

UUID of a mission profile.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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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](#)

DeleteConfig

Deletes a `Config`.

Request Syntax

```
DELETE /config/configType/configId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a `Config`.

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

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

Required: Yes

configType

Type of a `Config`.

Valid Values: `antenna-downlink | antenna-downlink-demod-decode | antenna-uplink | dataflow-endpoint | tracking | uplink-echo | s3-recording`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
    "configArn": "string",
    "configId": "string",
    "configType": "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.

configArn

ARN of a `Config`.

Type: String

configId

UUID of a `Config`.

Type: String

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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

DeleteDataflowEndpointGroup

Deletes a dataflow endpoint group.

Request Syntax

```
DELETE /dataflowEndpointGroup/dataflowEndpointGroupId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "dataflowEndpointGroupId": "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.

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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

DeleteEphemeris

Deletes an ephemeris

Request Syntax

```
DELETE /ephemeris/ephemerisId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ephemerisId

The AWS Ground Station ephemeris ID.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "ephemerisId": "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.

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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

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

DeleteMissionProfile

Deletes a mission profile.

Request Syntax

```
DELETE /missionprofile/missionProfileId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "missionProfileId": "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.

missionProfileId

UUID of a mission profile.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

See Also

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- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

DescribeContact

Describes an existing contact.

Request Syntax

```
GET /contact/contactId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "contactId": "string",
   "contactStatus": "string",
   "dataflowList": [
      {
         "destination": {
            "configDetails": { ... },
            "configId": "string",
            "configType": "string",
            "dataflowDestinationRegion": "string"
```

```
            },
            "errorMessage": "string",
            "source": {
                "configDetails": { ... },
                "configId": "string",
                "configType": "string",
                "dataflowSourceRegion": "string"
            }
        }
    ],
    "endTime": number,
    "errorMessage": "string",
    "groundStation": "string",
    "maximumElevation": {
        "unit": "string",
        "value": number
    },
    "missionProfileArn": "string",
    "postPassEndTime": number,
    "prePassStartTime": number,
    "region": "string",
    "satelliteArn": "string",
    "startTime": number,
    "tags": {
        "string" : "string"
    },
    "visibilityEndTime": number,
    "visibilityStartTime": number
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

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

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

contactStatus

Status of a contact.

Type: String

Valid Values: `AVAILABLE | AWS_CANCELLED | AWS_FAILED | CANCELLED | CANCELLING | COMPLETED | FAILED | FAILED_TO_SCHEDULE | PASS | POSTPASS | PREPASS | SCHEDULED | SCHEDULING`

dataflowList

List describing source and destination details for each dataflow edge.

Type: Array of DataflowDetail objects

endTime

End time of a contact in UTC.

Type: Timestamp

errorMessage

Error message for a contact.

Type: String

groundStation

Ground station for a contact.

Type: String

maximumElevation

Maximum elevation angle of a contact.

Type: Elevation object

missionProfileArn

ARN of a mission profile.

Type: String

postPassEndTime

Amount of time after a contact ends that you'd like to receive a CloudWatch event indicating the pass has finished.

Type: Timestamp

prePassStartTime

Amount of time prior to contact start you'd like to receive a CloudWatch event indicating an upcoming pass.

Type: Timestamp

region

Region of a contact.

Type: String

satelliteArn

ARN of a satellite.

Type: String

startTime

Start time of a contact in UTC.

Type: Timestamp

tags

Tags assigned to a contact.

Type: String to string map

visibilityEndTime

Projected time in UTC your satellite will set below the receive mask. This time is based on the satellite's current active ephemeris for future contacts and the ephemeris that was active during contact execution for completed contacts.

Type: Timestamp

visibilityStartTime

Projected time in UTC your satellite will rise above the receive mask. This time is based on the satellite's current active ephemeris for future contacts and the ephemeris that was active during contact execution for completed contacts.

Type: Timestamp

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

DescribeEphemeris

Describes an existing ephemeris.

Request Syntax

```
GET /ephemeris/ephemerisId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

ephemerisId

The AWS Ground Station ephemeris ID.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "creationTime": number,
   "enabled": boolean,
   "ephemerisId": "string",
   "invalidReason": "string",
   "name": "string",
   "priority": number,
   "satelliteId": "string",
   "status": "string",
```

```
      "suppliedData": { ... },
      "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.

creationTime

> The time the ephemeris was uploaded in UTC.
>
> Type: Timestamp

enabled

> Whether or not the ephemeris is enabled.
>
> Type: Boolean

ephemerisId

> The AWS Ground Station ephemeris ID.
>
> Type: String
>
> Length Constraints: Minimum length of 1. Maximum length of 128.
>
> Pattern: ^[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}$

invalidReason

> Reason that an ephemeris failed validation. Only provided for ephemerides with INVALID status.
>
> Type: String
>
> Valid Values: METADATA_INVALID | TIME_RANGE_INVALID | TRAJECTORY_INVALID | KMS_KEY_INVALID | VALIDATION_ERROR

name

A name string associated with the ephemeris. Used as a human-readable identifier for the ephemeris.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

priority

Customer-provided priority score to establish the order in which overlapping ephemerides should be used.

The default for customer-provided ephemeris priority is 1, and higher numbers take precedence.

Priority must be 1 or greater

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 99999.

satelliteId

The AWS Ground Station satellite ID associated with ephemeris.

Type: String

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

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

status

The status of the ephemeris.

Type: String

Valid Values: `VALIDATING | INVALID | ERROR | ENABLED | DISABLED | EXPIRED`

suppliedData

Supplied ephemeris data.

Type: EphemerisTypeDescription object

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

tags

Tags assigned to an ephemeris.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

GetAgentConfiguration

> **ⓘ Note**
>
> For use by AWS Ground Station Agent and shouldn't be called directly.

Gets the latest configuration information for a registered agent.

Request Syntax

```
GET /agent/agentId/configuration HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

agentId

UUID of agent to get configuration information for.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "agentId": "string",
    "taskingDocument": "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.

agentId

>   UUID of agent.

>   Type: String

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

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

taskingDocument

>   Tasking document for agent.

>   Type: String

Errors

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

DependencyException

>   Dependency encountered an error.

>   HTTP Status Code: 531

InvalidParameterException

>   One or more parameters are not valid.

>   HTTP Status Code: 431

ResourceNotFoundException

>   Resource was not found.

HTTP Status Code: 434

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](#)

GetConfig

Returns `Config` information.

Only one `Config` response can be returned.

Request Syntax

```
GET /config/configType/configId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a `Config`.

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

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

Required: Yes

configType

Type of a `Config`.

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "configArn": "string",
   "configData": { ... },
   "configId": "string",
   "configType": "string",
   "name": "string",
   "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.

configArn

   ARN of a `Config`

   Type: String

configData

   Data elements in a `Config`.

   Type: ConfigTypeData object

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

configId

   UUID of a `Config`.

   Type: String

configType

   Type of a `Config`.

   Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

name

Name of a `Config`.

Type: String

tags

Tags assigned to a `Config`.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

GetDataflowEndpointGroup

Returns the dataflow endpoint group.

Request Syntax

```
GET /dataflowEndpointGroup/dataflowEndpointGroupId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
    "contactPostPassDurationSeconds": number,
    "contactPrePassDurationSeconds": number,
    "dataflowEndpointGroupArn": "string",
    "dataflowEndpointGroupId": "string",
    "endpointsDetails": [
        {
            "awsGroundStationAgentEndpoint": {
                "agentStatus": "string",
                "auditResults": "string",
                "egressAddress": {
```

```
                    "mtu": number,
                    "socketAddress": {
                        "name": "string",
                        "port": number
                    }
                },
                "ingressAddress": {
                    "mtu": number,
                    "socketAddress": {
                        "name": "string",
                        "portRange": {
                            "maximum": number,
                            "minimum": number
                        }
                    }
                },
                "name": "string"
            },
            "endpoint": {
                "address": {
                    "name": "string",
                    "port": number
                },
                "mtu": number,
                "name": "string",
                "status": "string"
            },
            "healthReasons": [ "string" ],
            "healthStatus": "string",
            "securityDetails": {
                "roleArn": "string",
                "securityGroupIds": [ "string" ],
                "subnetIds": [ "string" ]
            }
        }
    ],
    "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.

contactPostPassDurationSeconds

Amount of time, in seconds, after a contact ends that the Ground Station Dataflow Endpoint Group will be in a POSTPASS state. A Ground Station Dataflow Endpoint Group State Change event will be emitted when the Dataflow Endpoint Group enters and exits the POSTPASS state.

Type: Integer

Valid Range: Minimum value of 120. Maximum value of 480.

contactPrePassDurationSeconds

Amount of time, in seconds, before a contact starts that the Ground Station Dataflow Endpoint Group will be in a PREPASS state. A Ground Station Dataflow Endpoint Group State Change event will be emitted when the Dataflow Endpoint Group enters and exits the PREPASS state.

Type: Integer

Valid Range: Minimum value of 120. Maximum value of 480.

dataflowEndpointGroupArn

ARN of a dataflow endpoint group.

Type: String

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

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

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

endpointsDetails

Details of a dataflow endpoint.

Type: Array of EndpointDetails objects

Array Members: Minimum number of 0 items. Maximum number of 500 items.

tags

Tags assigned to a dataflow endpoint group.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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 .NET)
- [AWS SDK for C++](AWS SDK for C++)
- [AWS SDK for Go v2](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](#)

GetMinuteUsage

Returns the number of reserved minutes used by account.

Request Syntax

```
POST /minute-usage HTTP/1.1
Content-type: application/json

{
    "month": number,
    "year": number
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

month

> The month being requested, with a value of 1-12.
>
> Type: Integer
>
> Valid Range: Minimum value of 1. Maximum value of 12.
>
> Required: Yes

year

> The year being requested, in the format of YYYY.
>
> Type: Integer
>
> Valid Range: Minimum value of 2018. Maximum value of 3000.
>
> Required: Yes

Response Syntax

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

{
    "estimatedMinutesRemaining": number,
    "isReservedMinutesCustomer": boolean,
    "totalReservedMinuteAllocation": number,
    "totalScheduledMinutes": number,
    "upcomingMinutesScheduled": number
}
```

Response Elements

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

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

estimatedMinutesRemaining

Estimated number of minutes remaining for an account, specific to the month being requested.

Type: Integer

isReservedMinutesCustomer

Returns whether or not an account has signed up for the reserved minutes pricing plan, specific to the month being requested.

Type: Boolean

totalReservedMinuteAllocation

Total number of reserved minutes allocated, specific to the month being requested.

Type: Integer

totalScheduledMinutes

Total scheduled minutes for an account, specific to the month being requested.

Type: Integer

upcomingMinutesScheduled

Upcoming minutes scheduled for an account, specific to the month being requested.

Type: Integer

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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

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

GetMissionProfile

Returns a mission profile.

Request Syntax

```
GET /missionprofile/missionProfileId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "contactPostPassDurationSeconds": number,
   "contactPrePassDurationSeconds": number,
   "dataflowEdges": [
      [ "string" ]
   ],
   "minimumViableContactDurationSeconds": number,
   "missionProfileArn": "string",
   "missionProfileId": "string",
```

```
        "name": "string",
        "region": "string",
        "streamsKmsKey": { ... },
        "streamsKmsRole": "string",
        "tags": {
            "string" : "string"
        },
        "trackingConfigArn": "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.

contactPostPassDurationSeconds

Amount of time after a contact ends that you'd like to receive a CloudWatch event indicating the pass has finished.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

contactPrePassDurationSeconds

Amount of time prior to contact start you'd like to receive a CloudWatch event indicating an upcoming pass.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

dataflowEdges

A list of lists of ARNs. Each list of ARNs is an edge, with a *from* `Config` and a *to* `Config`.

Type: Array of arrays of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Array Members: Fixed number of 2 items.

minimumViableContactDurationSeconds

Smallest amount of time in seconds that you'd like to see for an available contact. AWS Ground Station will not present you with contacts shorter than this duration.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 21600.

missionProfileArn

ARN of a mission profile.

Type: String

missionProfileId

UUID of a mission profile.

Type: String

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

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

name

Name of a mission profile.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

region

Region of a mission profile.

Type: String

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

Pattern: `^[\w-]+$`

streamsKmsKey

KMS key to use for encrypting streams.

Type: [KmsKey](#) object

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

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

tags

Tags assigned to a mission profile.

Type: String to string map

trackingConfigArn

ARN of a tracking `Config`.

Type: String

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

GetSatellite

Returns a satellite.

Request Syntax

```
GET /satellite/satelliteId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

satelliteId

UUID of a satellite.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
   "currentEphemeris": {
      "ephemerisId": "string",
      "epoch": number,
      "name": "string",
      "source": "string"
   },
   "groundStations": [ "string" ],
   "noradSatelliteID": number,
```

```
    "satelliteArn": "string",
    "satelliteId": "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.

currentEphemeris

>   The current ephemeris being used to compute the trajectory of the satellite.
>
>   Type: EphemerisMetaData object

groundStations

>   A list of ground stations to which the satellite is on-boarded.
>
>   Type: Array of strings
>
>   Array Members: Minimum number of 0 items. Maximum number of 500 items.
>
>   Length Constraints: Minimum length of 4. Maximum length of 500.
>
>   Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

noradSatelliteID

>   NORAD satellite ID number.
>
>   Type: Integer
>
>   Valid Range: Minimum value of 0. Maximum value of 99999.

satelliteArn

>   ARN of a satellite.
>
>   Type: String

satelliteId

>   UUID of a satellite.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListConfigs

Returns a list of `Config` objects.

Request Syntax

```
GET /config?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of `Configs` returned.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Next token returned in the request of a previous `ListConfigs` call. Used to get the next page of results.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "configList": [
      {
         "configArn": "string",
         "configId": "string",
```

```
            "configType": "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.

configList

List of `Config` items.

Type: Array of ConfigListItem objects

nextToken

Next token returned in the response of a previous `ListConfigs` call. Used to get the next page of results.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListContacts

Returns a list of contacts.

If `statusList` contains AVAILABLE, the request must include `groundStation`, `missionprofileArn`, and `satelliteArn`.

Request Syntax

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

{
    "endTime": number,
    "groundStation": "string",
    "maxResults": number,
    "missionProfileArn": "string",
    "nextToken": "string",
    "satelliteArn": "string",
    "startTime": number,
    "statusList": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

endTime

> End time of a contact in UTC.
>
> Type: Timestamp
>
> Required: Yes

groundStation

> Name of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 500.

Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

Required: No

maxResults

Maximum number of contacts returned.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

missionProfileArn

ARN of a mission profile.

Type: String

Required: No

nextToken

Next token returned in the request of a previous `ListContacts` call. Used to get the next page of results.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Required: No

satelliteArn

ARN of a satellite.

Type: String

Required: No

startTime

    Start time of a contact in UTC.

    Type: Timestamp

    Required: Yes

statusList

    Status of a contact reservation.

    Type: Array of strings

    Array Members: Minimum number of 0 items. Maximum number of 500 items.

    Valid Values: AVAILABLE | AWS_CANCELLED | AWS_FAILED | CANCELLED | CANCELLING | COMPLETED | FAILED | FAILED_TO_SCHEDULE | PASS | POSTPASS | PREPASS | SCHEDULED | SCHEDULING

    Required: Yes

Response Syntax

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

{
   "contactList": [
      {
         "contactId": "string",
         "contactStatus": "string",
         "endTime": number,
         "errorMessage": "string",
         "groundStation": "string",
         "maximumElevation": {
            "unit": "string",
            "value": number
         },
         "missionProfileArn": "string",
         "postPassEndTime": number,
         "prePassStartTime": number,
         "region": "string",
```

```
            "satelliteArn": "string",
            "startTime": number,
            "tags": {
                "string" : "string"
            },
            "visibilityEndTime": number,
            "visibilityStartTime": number
        }
    ],
    "nextToken": "string"
}
```

Response Elements

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

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

contactList

   List of contacts.

   Type: Array of ContactData objects

nextToken

   Next token returned in the response of a previous `ListContacts` call. Used to get the next page of results.

   Type: String

   Length Constraints: Minimum length of 3. Maximum length of 1000.

   Pattern: ^[A-Za-z0-9-/+_.=]+$

Errors

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

DependencyException

   Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListDataflowEndpointGroups

Returns a list of `DataflowEndpoint` groups.

Request Syntax

```
GET /dataflowEndpointGroup?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of dataflow endpoint groups returned.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Next token returned in the request of a previous `ListDataflowEndpointGroups` call. Used to get the next page of results.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "dataflowEndpointGroupList": [
      {
         "dataflowEndpointGroupArn": "string",
         "dataflowEndpointGroupId": "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.

dataflowEndpointGroupList

A list of dataflow endpoint groups.

Type: Array of DataflowEndpointListItem objects

nextToken

Next token returned in the response of a previous `ListDataflowEndpointGroups` call. Used to get the next page of results.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListEphemerides

List existing ephemerides.

Request Syntax

```
POST /ephemerides?maxResults=maxResults&nextToken=nextToken HTTP/1.1
Content-type: application/json

{
   "endTime": number,
   "satelliteId": "string",
   "startTime": number,
   "statusList": [ "string" ]
}
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of ephemerides to return.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Pagination token.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: ^[A-Za-z0-9-/+_.=]+$

Request Body

The request accepts the following data in JSON format.

endTime

The end time to list in UTC. The operation will return an ephemeris if its expiration time is within the time range defined by the startTime and endTime.

Type: Timestamp

Required: Yes

satelliteId

The AWS Ground Station satellite ID to list ephemeris for.

Type: String

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

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

Required: Yes

startTime

The start time to list in UTC. The operation will return an ephemeris if its expiration time is within the time range defined by the `startTime` and `endTime`.

Type: Timestamp

Required: Yes

statusList

The list of ephemeris status to return.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Valid Values: `VALIDATING | INVALID | ERROR | ENABLED | DISABLED | EXPIRED`

Required: No

Response Syntax

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

{
   "ephemerides": [
      {
```

```
            "creationTime": number,
            "enabled": boolean,
            "ephemerisId": "string",
            "name": "string",
            "priority": number,
            "sourceS3Object": {
                "bucket": "string",
                "key": "string",
                "version": "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.

ephemerides

    List of ephemerides.

    Type: Array of EphemerisItem objects

    Array Members: Minimum number of 1 item. Maximum number of 500 items.

nextToken

    Pagination token.

    Type: String

    Length Constraints: Minimum length of 3. Maximum length of 1000.

    Pattern: ^[A-Za-z0-9-/+_.=]+$

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListGroundStations

Returns a list of ground stations.

Request Syntax

```
GET /groundstation?maxResults=maxResults&nextToken=nextToken&satelliteId=satelliteId
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of ground stations returned.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Next token that can be supplied in the next call to get the next page of ground stations.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

satelliteId

Satellite ID to retrieve on-boarded ground stations.

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

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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "groundStationList": [
      {
         "groundStationId": "string",
         "groundStationName": "string",
         "region": "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.

groundStationList

List of ground stations.

Type: Array of GroundStationData objects

nextToken

Next token that can be supplied in the next call to get the next page of ground stations.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: ^[A-Za-z0-9-/+_.=]+$

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListMissionProfiles

Returns a list of mission profiles.

Request Syntax

```
GET /missionprofile?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of mission profiles returned.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Next token returned in the request of a previous `ListMissionProfiles` call. Used to get the next page of results.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Request Body

The request does not have a request body.

Response Syntax

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

{
   "missionProfileList": [
      {
         "missionProfileArn": "string",
         "missionProfileId": "string",
```

```
            "name": "string",
            "region": "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.

missionProfileList

List of mission profiles.

Type: Array of MissionProfileListItem objects

nextToken

Next token returned in the response of a previous `ListMissionProfiles` call. Used to get the next page of results.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: `^[A-Za-z0-9-/+_.=]+$`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListSatellites

Returns a list of satellites.

Request Syntax

```
GET /satellite?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of satellites returned.

Valid Range: Minimum value of 0. Maximum value of 100.

nextToken

Next token that can be supplied in the next call to get the next page of satellites.

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: ^[A-Za-z0-9-/+_.=]+$

Request Body

The request does not have a request body.

Response Syntax

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

{
   "nextToken": "string",
   "satellites": [
      {
         "currentEphemeris": {
            "ephemerisId": "string",
```

```
                "epoch": number,
                "name": "string",
                "source": "string"
            },
            "groundStations": [ "string" ],
            "noradSatelliteID": number,
            "satelliteArn": "string",
            "satelliteId": "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

Next token that can be supplied in the next call to get the next page of satellites.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 1000.

Pattern: ^[A-Za-z0-9-/+_.=]+$

satellites

List of satellites.

Type: Array of SatelliteListItem objects

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

ListTagsForResource

Returns a list of tags for a specified resource.

Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

ARN of a resource.

Length Constraints: Minimum length of 5. Maximum length of 1024.

Pattern: `^(arn:aws:)[\s\S]{0,1024}$`

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

    Tags assigned to a resource.

    Type: String to string map

Errors

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

DependencyException

    Dependency encountered an error.

    HTTP Status Code: 531

InvalidParameterException

    One or more parameters are not valid.

    HTTP Status Code: 431

ResourceNotFoundException

    Resource was not found.

    HTTP Status Code: 434

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](#)

RegisterAgent

> **ⓘ Note**
>
> For use by AWS Ground Station Agent and shouldn't be called directly.

Registers a new agent with AWS Ground Station.

Request Syntax

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

{
   "agentDetails": {
      "agentCpuCores": [ number ],
      "agentVersion": "string",
      "componentVersions": [
         {
            "componentType": "string",
            "versions": [ "string" ]
         }
      ],
      "instanceId": "string",
      "instanceType": "string",
      "reservedCpuCores": [ number ]
   },
   "discoveryData": {
      "capabilityArns": [ "string" ],
      "privateIpAddresses": [ "string" ],
      "publicIpAddresses": [ "string" ]
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

agentDetails

Detailed information about the agent being registered.

Type: AgentDetails object

Required: Yes

discoveryData

Data for associating an agent with the capabilities it is managing.

Type: DiscoveryData object

Required: Yes

Response Syntax

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

{
    "agentId": "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.

agentId

UUID of registered agent.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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 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

ReserveContact

Reserves a contact using specified parameters.

Request Syntax

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

{
    "endTime": number,
    "groundStation": "string",
    "missionProfileArn": "string",
    "satelliteArn": "string",
    "startTime": number,
    "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.

endTime

> End time of a contact in UTC.
>
> Type: Timestamp
>
> Required: Yes

groundStation

> Name of a ground station.
>
> Type: String
>
> Length Constraints: Minimum length of 4. Maximum length of 500.

Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

Required: Yes

missionProfileArn

ARN of a mission profile.

Type: String

Required: Yes

satelliteArn

ARN of a satellite

Type: String

Required: Yes

startTime

Start time of a contact in UTC.

Type: Timestamp

Required: Yes

tags

Tags assigned to a contact.

Type: String to string map

Required: No

Response Syntax

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

{
   "contactId": "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.

contactId

UUID of a contact.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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

Assigns a tag to a resource.

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

ARN of a resource tag.

Length Constraints: Minimum length of 5. Maximum length of 1024.

Pattern: `^(arn:aws:)[\s\S]{0,1024}$`

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

Tags assigned to a resource.

Type: String to string map

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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

Deassigns a resource tag.

Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

ARN of a resource.

Length Constraints: Minimum length of 5. Maximum length of 1024.

Pattern: `^(arn:aws:)[\s\S]{0,1024}$`

Required: Yes

tagKeys

Keys of a resource tag.

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Length Constraints: Minimum length of 1.

Pattern: `^[\s\S]+$`

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](#).

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

UpdateAgentStatus

> ℹ️ **Note**
>
> For use by AWS Ground Station Agent and shouldn't be called directly.

Update the status of the agent.

Request Syntax

```
PUT /agent/agentId HTTP/1.1
Content-type: application/json

{
    "aggregateStatus": {
        "signatureMap": {
            "string" : boolean
        },
        "status": "string"
    },
    "componentStatuses": [
        {
            "bytesReceived": number,
            "bytesSent": number,
            "capabilityArn": "string",
            "componentType": "string",
            "dataflowId": "string",
            "packetsDropped": number,
            "status": "string"
        }
    ],
    "taskId": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

agentId

UUID of agent to update.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

aggregateStatus

Aggregate status for agent.

Type: AggregateStatus object

Required: Yes

componentStatuses

List of component statuses for agent.

Type: Array of ComponentStatusData objects

Array Members: Minimum number of 0 items. Maximum number of 20 items.

Required: Yes

taskId

GUID of agent task.

Type: String

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

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
    "agentId": "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.

agentId

UUID of updated agent.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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

UpdateConfig

Updates the `Config` used when scheduling contacts.

Updating a `Config` will not update the execution parameters for existing future contacts scheduled with this `Config`.

Request Syntax

```
PUT /config/configType/configId HTTP/1.1
Content-type: application/json

{
   "configData": { ... },
   "name": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a `Config`.

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

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

Required: Yes

configType

Type of a `Config`.

Valid Values: antenna-downlink | antenna-downlink-demod-decode | antenna-uplink | dataflow-endpoint | tracking | uplink-echo | s3-recording

Required: Yes

Request Body

The request accepts the following data in JSON format.

configData

Parameters of a `Config`.

Type: ConfigTypeData object

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

Required: Yes

name

Name of a `Config`.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: Yes

Response Syntax

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

{
   "configArn": "string",
   "configId": "string",
   "configType": "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.

configArn

ARN of a `Config`.

Type: String

configId

UUID of a `Config`.

Type: String

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Errors

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

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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](#)

UpdateEphemeris

Updates an existing ephemeris

Request Syntax

```
PUT /ephemeris/ephemerisId HTTP/1.1
Content-type: application/json

{
   "enabled": boolean,
   "name": "string",
   "priority": number
}
```

URI Request Parameters

The request uses the following URI parameters.

ephemerisId

   The AWS Ground Station ephemeris ID.

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

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

   Required: Yes

Request Body

The request accepts the following data in JSON format.

enabled

   Whether the ephemeris is enabled or not. Changing this value will not require the ephemeris to be re-validated.

   Type: Boolean

   Required: Yes

name

A name string associated with the ephemeris. Used as a human-readable identifier for the ephemeris.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: No

priority

Customer-provided priority score to establish the order in which overlapping ephemerides should be used.

The default for customer-provided ephemeris priority is 1, and higher numbers take precedence.

Priority must be 1 or greater

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 99999.

Required: No

Response Syntax

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

{
    "ephemerisId": "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.

ephemerisId

   The AWS Ground Station ephemeris ID.

   Type: String

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

   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.

DependencyException

   Dependency encountered an error.

   HTTP Status Code: 531

InvalidParameterException

   One or more parameters are not valid.

   HTTP Status Code: 431

ResourceNotFoundException

   Resource was not found.

   HTTP Status Code: 434

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](#)

UpdateMissionProfile

Updates a mission profile.

Updating a mission profile will not update the execution parameters for existing future contacts.

Request Syntax

```
PUT /missionprofile/missionProfileId HTTP/1.1
Content-type: application/json

{
   "contactPostPassDurationSeconds": number,
   "contactPrePassDurationSeconds": number,
   "dataflowEdges": [
      [ "string" ]
   ],
   "minimumViableContactDurationSeconds": number,
   "name": "string",
   "streamsKmsKey": { ... },
   "streamsKmsRole": "string",
   "trackingConfigArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

contactPostPassDurationSeconds

Amount of time after a contact ends that you'd like to receive a Ground Station Contact State Change event indicating the pass has finished.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

Required: No

contactPrePassDurationSeconds

Amount of time after a contact ends that you'd like to receive a Ground Station Contact State Change event indicating the pass has finished.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 21600.

Required: No

dataflowEdges

A list of lists of ARNs. Each list of ARNs is an edge, with a *from* `Config` and a *to* `Config`.

Type: Array of arrays of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Array Members: Fixed number of 2 items.

Required: No

minimumViableContactDurationSeconds

Smallest amount of time in seconds that you'd like to see for an available contact. AWS Ground Station will not present you with contacts shorter than this duration.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 21600.

Required: No

name

Name of a mission profile.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: No

streamsKmsKey

KMS key to use for encrypting streams.

Type: KmsKey object

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

Required: No

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

Required: No

trackingConfigArn

ARN of a tracking `Config`.

Type: String

Required: No

Response Syntax

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

```
{
    "missionProfileId": "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.

missionProfileId

UUID of a mission profile.

Type: String

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

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.

DependencyException

Dependency encountered an error.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

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 Ground Station 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:

- AgentDetails
- AggregateStatus
- AntennaDemodDecodeDetails
- AntennaDownlinkConfig
- AntennaDownlinkDemodDecodeConfig
- AntennaUplinkConfig
- AwsGroundStationAgentEndpoint
- ComponentStatusData
- ComponentVersion
- ConfigDetails
- ConfigListItem
- ConfigTypeData
- ConnectionDetails
- ContactData
- DataflowDetail
- DataflowEndpoint
- DataflowEndpointConfig
- DataflowEndpointListItem
- DecodeConfig
- DemodulationConfig

- [Destination](#)
- [DiscoveryData](#)
- [Eirp](#)
- [Elevation](#)
- [EndpointDetails](#)
- [EphemerisData](#)
- [EphemerisDescription](#)
- [EphemerisItem](#)
- [EphemerisMetaData](#)
- [EphemerisTypeDescription](#)
- [Frequency](#)
- [FrequencyBandwidth](#)
- [GroundStationData](#)
- [IntegerRange](#)
- [KmsKey](#)
- [MissionProfileListItem](#)
- [OEMEphemeris](#)
- [RangedConnectionDetails](#)
- [RangedSocketAddress](#)
- [S3Object](#)
- [S3RecordingConfig](#)
- [S3RecordingDetails](#)
- [SatelliteListItem](#)
- [SecurityDetails](#)
- [SocketAddress](#)
- [Source](#)
- [SpectrumConfig](#)
- [TimeRange](#)
- [TLEData](#)
- [TLEEphemeris](#)

- [TrackingConfig](#)
- [UplinkEchoConfig](#)
- [UplinkSpectrumConfig](#)

AgentDetails

Detailed information about the agent.

Contents

agentVersion

Current agent version.

Type: String

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

Pattern: ^(0|[1-9]\d*)(\.(0|[1-9]\d*))*$

Required: Yes

componentVersions

List of versions being used by agent components.

Type: Array of ComponentVersion objects

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Required: Yes

instanceId

ID of EC2 instance agent is running on.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 64.

Pattern: ^[a-z0-9-]{10,64}$

Required: Yes

instanceType

Type of EC2 instance agent is running on.

Type: String

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

Pattern: `^[a-z0-9.-]{1,64}$`

Required: Yes

agentCpuCores

List of CPU cores reserved for the agent.

Type: Array of integers

Array Members: Minimum number of 0 items. Maximum number of 256 items.

Required: No

reservedCpuCores

> ⓘ **Note**
>
> This field should not be used. Use agentCpuCores instead.

List of CPU cores reserved for processes other than the agent running on the EC2 instance.

Type: Array of integers

Array Members: Minimum number of 0 items. Maximum number of 256 items.

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](#)

AggregateStatus

Aggregate status of Agent components.

Contents

status

Aggregate status.

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: Yes

signatureMap

Sparse map of failure signatures.

Type: String to boolean map

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](#)

AntennaDemodDecodeDetails

Details about an antenna demod decode `Config` used in a contact.

Contents

outputNode

Name of an antenna demod decode output node used in a contact.

Type: String

Required: No

See Also

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

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

AntennaDownlinkConfig

Information about how AWS Ground Station should configure an antenna for downlink during a contact.

Contents

spectrumConfig

Object that describes a spectral `Config`.

Type: SpectrumConfig object

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

AntennaDownlinkDemodDecodeConfig

Information about how AWS Ground Station should configure an antenna for downlink demod decode during a contact.

Contents

decodeConfig

Information about the decode `Config`.

Type: [DecodeConfig](#) object

Required: Yes

demodulationConfig

Information about the demodulation `Config`.

Type: [DemodulationConfig](#) object

Required: Yes

spectrumConfig

Information about the spectral `Config`.

Type: [SpectrumConfig](#) object

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](#)

AntennaUplinkConfig

Information about the uplink `Config` of an antenna.

Contents

spectrumConfig

Information about the uplink spectral `Config`.

Type: [UplinkSpectrumConfig](#) object

Required: Yes

targetEirp

EIRP of the target.

Type: [Eirp](#) object

Required: Yes

transmitDisabled

Whether or not uplink transmit is disabled.

Type: Boolean

Required: No

See Also

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

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

AwsGroundStationAgentEndpoint

Information about AwsGroundStationAgentEndpoint.

Contents

egressAddress

The egress address of AgentEndpoint.

Type: ConnectionDetails object

Required: Yes

ingressAddress

The ingress address of AgentEndpoint.

Type: RangedConnectionDetails object

Required: Yes

name

Name string associated with AgentEndpoint. Used as a human-readable identifier for AgentEndpoint.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: Yes

agentStatus

The status of AgentEndpoint.

Type: String

Valid Values: `SUCCESS | FAILED | ACTIVE | INACTIVE`

Required: No

auditResults

The results of the audit.

Type: String

Valid Values: HEALTHY | UNHEALTHY

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](#)

ComponentStatusData

Data on the status of agent components.

Contents

capabilityArn

Capability ARN of the component.

Type: String

Required: Yes

componentType

The Component type.

Type: String

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

Required: Yes

dataflowId

Dataflow UUID associated with the component.

Type: String

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

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

Required: Yes

status

Component status.

Type: String

Valid Values: `SUCCESS | FAILED | ACTIVE | INACTIVE`

Required: Yes

bytesReceived

Bytes received by the component.

Type: Long

Required: No

bytesSent

Bytes sent by the component.

Type: Long

Required: No

packetsDropped

Packets dropped by component.

Type: Long

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](#)

ComponentVersion

Version information for agent components.

Contents

componentType

Component type.

Type: String

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

Required: Yes

versions

List of versions.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

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

Pattern: `^(0|[1-9]\d*)(\.(0|[1-9]\d*))*$`

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](#)

ConfigDetails

Details for certain `Config` object types in a contact.

Contents

> ⚠️ **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

antennaDemodDecodeDetails

Details for antenna demod decode `Config` in a contact.

Type: AntennaDemodDecodeDetails object

Required: No

endpointDetails

Information about the endpoint details.

Type: EndpointDetails object

Required: No

s3RecordingDetails

Details for an S3 recording `Config` in a contact.

Type: S3RecordingDetails 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](#)

ConfigListItem

An item in a list of `Config` objects.

Contents

configArn

ARN of a `Config`.

Type: String

Required: No

configId

UUID of a `Config`.

Type: String

Required: No

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Required: No

name

Name of a `Config`.

Type: String

Required: No

See Also

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

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

ConfigTypeData

Object containing the parameters of a `Config`.

See the subtype definitions for what each type of `Config` contains.

Contents

> ⚠️ **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

antennaDownlinkConfig

Information about how AWS Ground Station should configure an antenna for downlink during a contact.

Type: [AntennaDownlinkConfig](#) object

Required: No

antennaDownlinkDemodDecodeConfig

Information about how AWS Ground Station should configure an antenna for downlink demod decode during a contact.

Type: [AntennaDownlinkDemodDecodeConfig](#) object

Required: No

antennaUplinkConfig

Information about how AWS Ground Station should configure an antenna for uplink during a contact.

Type: [AntennaUplinkConfig](#) object

Required: No

dataflowEndpointConfig

Information about the dataflow endpoint `Config`.

Type: [DataflowEndpointConfig](#) object

Required: No

s3RecordingConfig

Information about an S3 recording `Config`.

Type: [S3RecordingConfig](#) object

Required: No

trackingConfig

Object that determines whether tracking should be used during a contact executed with this `Config` in the mission profile.

Type: [TrackingConfig](#) object

Required: No

uplinkEchoConfig

Information about an uplink echo `Config`.

Parameters from the `AntennaUplinkConfig`, corresponding to the specified `AntennaUplinkConfigArn`, are used when this `UplinkEchoConfig` is used in a contact.

Type: [UplinkEchoConfig](#) 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](#)

ConnectionDetails

Egress address of AgentEndpoint with an optional mtu.

Contents

socketAddress

A socket address.

Type: [SocketAddress](#) object

Required: Yes

mtu

Maximum transmission unit (MTU) size in bytes of a dataflow endpoint.

Type: Integer

Required: No

See Also

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

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

ContactData

Data describing a contact.

Contents

contactId

UUID of a contact.

Type: String

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

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

Required: No

contactStatus

Status of a contact.

Type: String

Valid Values: AVAILABLE | AWS_CANCELLED | AWS_FAILED | CANCELLED | CANCELLING | COMPLETED | FAILED | FAILED_TO_SCHEDULE | PASS | POSTPASS | PREPASS | SCHEDULED | SCHEDULING

Required: No

endTime

End time of a contact in UTC.

Type: Timestamp

Required: No

errorMessage

Error message of a contact.

Type: String

Required: No

groundStation

Name of a ground station.

Type: String

Required: No

maximumElevation

Maximum elevation angle of a contact.

Type: [Elevation](#) object

Required: No

missionProfileArn

ARN of a mission profile.

Type: String

Required: No

postPassEndTime

Amount of time after a contact ends that you'd like to receive a CloudWatch event indicating the pass has finished.

Type: Timestamp

Required: No

prePassStartTime

Amount of time prior to contact start you'd like to receive a CloudWatch event indicating an upcoming pass.

Type: Timestamp

Required: No

region

Region of a contact.

Type: String

Required: No

satelliteArn

ARN of a satellite.

Type: String

Required: No

startTime

Start time of a contact in UTC.

Type: Timestamp

Required: No

tags

Tags assigned to a contact.

Type: String to string map

Required: No

visibilityEndTime

Projected time in UTC your satellite will set below the [receive mask](#). This time is based on the satellite's current active ephemeris for future contacts and the ephemeris that was active during contact execution for completed contacts. *This field is not present for contacts with a SCHEDULING or SCHEDULED status.*

Type: Timestamp

Required: No

visibilityStartTime

Projected time in UTC your satellite will rise above the [receive mask](#). This time is based on the satellite's current active ephemeris for future contacts and the ephemeris that was active during contact execution for completed contacts. *This field is not present for contacts with a SCHEDULING or SCHEDULED status.*

Type: Timestamp

Required: No

See Also

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

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

DataflowDetail

Information about a dataflow edge used in a contact.

Contents

destination

Dataflow details for the destination side.

Type: [Destination](#) object

Required: No

errorMessage

Error message for a dataflow.

Type: String

Required: No

source

Dataflow details for the source side.

Type: [Source](#) 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](#)

DataflowEndpoint

Information about a dataflow endpoint.

Contents

address

Socket address of a dataflow endpoint.

Type: [SocketAddress](#) object

Required: No

mtu

Maximum transmission unit (MTU) size in bytes of a dataflow endpoint.

Type: Integer

Valid Range: Minimum value of 1400. Maximum value of 1500.

Required: No

name

Name of a dataflow endpoint.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: No

status

Status of a dataflow endpoint.

Type: String

Valid Values: `created | creating | deleted | deleting | failed`

Required: No

See Also

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

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

DataflowEndpointConfig

Information about the dataflow endpoint `Config`.

Contents

dataflowEndpointName

   Name of a dataflow endpoint.

   Type: String

   Required: Yes

dataflowEndpointRegion

   Region of a dataflow endpoint.

   Type: String

   Required: No

See Also

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

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

DataflowEndpointListItem

Item in a list of `DataflowEndpoint` groups.

Contents

dataflowEndpointGroupArn

ARN of a dataflow endpoint group.

Type: String

Required: No

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

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

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

Required: No

See Also

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

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

DecodeConfig

Information about the decode `Config`.

Contents

unvalidatedJSON

Unvalidated JSON of a decode `Config`.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 8192.

Pattern: `^[{}\[\]:.,"0-9A-z\-_\s]{2,8192}$`

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](#)

DemodulationConfig

Information about the demodulation `Config`.

Contents

unvalidatedJSON

Unvalidated JSON of a demodulation `Config`.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 8192.

Pattern: `^[{}\[\]:.,"0-9A-z\-_\s]{2,8192}$`

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](#)

Destination

Dataflow details for the destination side.

Contents

configDetails

Additional details for a `Config`, if type is dataflow endpoint or antenna demod decode.

Type: [ConfigDetails](#) object

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

Required: No

configId

UUID of a `Config`.

Type: String

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

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

Required: No

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Required: No

dataflowDestinationRegion

Region of a dataflow destination.

Type: String

Required: No

See Also

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

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

DiscoveryData

Data for agent discovery.

Contents

capabilityArns

    List of capabilities to associate with agent.

    Type: Array of strings

    Array Members: Minimum number of 1 item. Maximum number of 20 items.

    Required: Yes

privateIpAddresses

    List of private IP addresses to associate with agent.

    Type: Array of strings

    Array Members: Minimum number of 1 item. Maximum number of 20 items.

    Length Constraints: Minimum length of 7. Maximum length of 16.

    Pattern: `^\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}$`

    Required: Yes

publicIpAddresses

    List of public IP addresses to associate with agent.

    Type: Array of strings

    Array Members: Minimum number of 1 item. Maximum number of 20 items.

    Length Constraints: Minimum length of 7. Maximum length of 16.

    Pattern: `^\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}$`

    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](#)

Eirp

Object that represents EIRP.

Contents

units

Units of an EIRP.

Type: String

Valid Values: dBW

Required: Yes

value

Value of an EIRP. Valid values are between 20.0 to 50.0 dBW.

Type: Double

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](#)

Elevation

Elevation angle of the satellite in the sky during a contact.

Contents

unit

Elevation angle units.

Type: String

Valid Values: DEGREE_ANGLE | RADIAN

Required: Yes

value

Elevation angle value.

Type: Double

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](#)

EndpointDetails

Information about the endpoint details.

Contents

awsGroundStationAgentEndpoint

An agent endpoint.

Type: [AwsGroundStationAgentEndpoint](#) object

Required: No

endpoint

A dataflow endpoint.

Type: [DataflowEndpoint](#) object

Required: No

healthReasons

Health reasons for a dataflow endpoint. This field is ignored when calling `CreateDataflowEndpointGroup`.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Valid Values: `NO_REGISTERED_AGENT` | `INVALID_IP_OWNERSHIP` | `NOT_AUTHORIZED_TO_CREATE_SLR` | `UNVERIFIED_IP_OWNERSHIP` | `INITIALIZING_DATAPLANE` | `DATAPLANE_FAILURE` | `HEALTHY`

Required: No

healthStatus

A dataflow endpoint health status. This field is ignored when calling `CreateDataflowEndpointGroup`.

Type: String

Valid Values: UNHEALTHY | HEALTHY

Required: No

securityDetails

Endpoint security details including a list of subnets, a list of security groups and a role to connect streams to instances.

Type: SecurityDetails 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

EphemerisData

Ephemeris data.

Contents

> ⚠️ **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

oem

Ephemeris data in Orbit Ephemeris Message (OEM) format.

Type: [OEMEphemeris](#) object

Required: No

tle

Two-line element set (TLE) ephemeris.

Type: [TLEEphemeris](#) 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](#)

EphemerisDescription

Description of ephemeris.

Contents

ephemerisData

Supplied ephemeris data.

Type: String

Length Constraints: Minimum length of 1.

Pattern: ^[\s\S]+$

Required: No

sourceS3Object

Source S3 object used for the ephemeris.

Type: S3Object 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

EphemerisItem

Ephemeris item.

Contents

creationTime

The time the ephemeris was uploaded in UTC.

Type: Timestamp

Required: No

enabled

Whether or not the ephemeris is enabled.

Type: Boolean

Required: No

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

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

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

Required: No

name

A name string associated with the ephemeris. Used as a human-readable identifier for the ephemeris.

Type: String

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

Pattern: ^[a-zA-Z0-9_:-]{1,256}$

Required: No

priority

Customer-provided priority score to establish the order in which overlapping ephemerides should be used.

The default for customer-provided ephemeris priority is 1, and higher numbers take precedence.

Priority must be 1 or greater

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 99999.

Required: No

sourceS3Object

Source S3 object used for the ephemeris.

Type: S3Object object

Required: No

status

The status of the ephemeris.

Type: String

Valid Values: `VALIDATING | INVALID | ERROR | ENABLED | DISABLED | EXPIRED`

Required: No

See Also

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

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

- [AWS SDK for Ruby V3](#)

EphemerisMetaData

Metadata describing a particular ephemeris.

Contents

source

The `EphemerisSource` that generated a given ephemeris.

Type: String

Valid Values: `CUSTOMER_PROVIDED | SPACE_TRACK`

Required: Yes

ephemerisId

UUID of a customer-provided ephemeris.

This field is not populated for default ephemerides from Space Track.

Type: String

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

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

Required: No

epoch

The epoch of a default, ephemeris from Space Track in UTC.

This field is not populated for customer-provided ephemerides.

Type: Timestamp

Required: No

name

A name string associated with the ephemeris. Used as a human-readable identifier for the
ephemeris.

A name is only returned for customer-provider ephemerides that have a name associated.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

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](#)

EphemerisTypeDescription

Contents

> ⚠️ **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

oem

Description of ephemeris.

Type: [EphemerisDescription](#) object

Required: No

tle

Description of ephemeris.

Type: [EphemerisDescription](#) 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](#)

Frequency

Object that describes the frequency.

Contents

units

Frequency units.

Type: String

Valid Values: GHz | MHz | kHz

Required: Yes

value

Frequency value. Valid values are between 2200 to 2300 MHz and 7750 to 8400 MHz for downlink and 2025 to 2120 MHz for uplink.

Type: Double

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](#)

FrequencyBandwidth

Object that describes the frequency bandwidth.

Contents

units

Frequency bandwidth units.

Type: String

Valid Values: `GHz` | `MHz` | `kHz`

Required: Yes

value

Frequency bandwidth value. AWS Ground Station currently has the following bandwidth limitations:

- For `AntennaDownlinkDemodDecodeconfig`, valid values are between 125 kHz to 650 MHz.
- For `AntennaDownlinkconfig`, valid values are between 10 kHz to 54 MHz.
- For `AntennaUplinkConfig`, valid values are between 10 kHz to 54 MHz.

Type: Double

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](#)

GroundStationData

Information about the ground station data.

Contents

groundStationId

UUID of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 500.

Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

Required: No

groundStationName

Name of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 500.

Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

Required: No

region

Ground station Region.

Type: String

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

Pattern: `^[\w-]+$`

Required: No

See Also

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

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

IntegerRange

An integer range that has a minimum and maximum value.

Contents

maximum

A maximum value.

Type: Integer

Required: Yes

minimum

A minimum value.

Type: Integer

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](#)

KmsKey

AWS Key Management Service (KMS) Key.

Contents

> ⚠️ **Important**
>
> This data type is a UNION, so only one of the following members can be specified when used or returned.

kmsAliasArn

KMS Alias Arn.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 512.

Pattern: `^arn:aws[a-zA-Z-]{0,16}:kms:[a-z]{2}(-[a-z]{1,16}){1,3}-\d{1}:\d{12}:((alias/[a-zA-Z0-9:/_-]{1,256}))$`

Required: No

kmsAliasName

KMS Alias Name.

Type: String

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

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

Required: No

kmsKeyArn

KMS Key Arn.

Type: String

Required: No

See Also

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

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

MissionProfileListItem

Item in a list of mission profiles.

Contents

missionProfileArn

ARN of a mission profile.

Type: String

Required: No

missionProfileId

UUID of a mission profile.

Type: String

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

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

Required: No

name

Name of a mission profile.

Type: String

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

Pattern: `^[ a-zA-Z0-9_:-]{1,256}$`

Required: No

region

Region of a mission profile.

Type: String

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

Pattern: `^[\w-]+$`

Required: No

See Also

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

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

OEMEphemeris

Ephemeris data in Orbit Ephemeris Message (OEM) format.

Contents

oemData

The data for an OEM ephemeris, supplied directly in the request rather than through an S3 object.

Type: String

Length Constraints: Minimum length of 1.

Pattern: ^[\s\S]+$

Required: No

s3Object

Identifies the S3 object to be used as the ephemeris.

Type: [S3Object](#) 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](#)

RangedConnectionDetails

Ingress address of AgentEndpoint with a port range and an optional mtu.

Contents

socketAddress

A ranged socket address.

Type: [RangedSocketAddress](#) object

Required: Yes

mtu

Maximum transmission unit (MTU) size in bytes of a dataflow endpoint.

Type: Integer

Valid Range: Minimum value of 1400. Maximum value of 1500.

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](#)

RangedSocketAddress

A socket address with a port range.

Contents

name

IPv4 socket address.

Type: String

Length Constraints: Minimum length of 7. Maximum length of 16.

Pattern: `^\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}$`

Required: Yes

portRange

Port range of a socket address.

Type: IntegerRange object

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

S3Object

Object stored in S3 containing ephemeris data.

Contents

bucket

An Amazon S3 Bucket name.

Type: String

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

Pattern: `^[a-z0-9.-]{3,63}$`

Required: No

key

An Amazon S3 key for the ephemeris.

Type: String

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

Pattern: `^[a-zA-Z0-9!*'\)\(./_-]{1,1024}$`

Required: No

version

For versioned S3 objects, the version to use for the ephemeris.

Type: String

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

Pattern: `^[\s\S]{1,1024}$`

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](#)

S3RecordingConfig

Information about an S3 recording `Config`.

Contents

bucketArn

ARN of the bucket to record to.

Type: String

Required: Yes

roleArn

ARN of the role Ground Station assumes to write data to the bucket.

Type: String

Required: Yes

prefix

S3 Key prefix to prefice data files.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 900.

Pattern: `^([a-zA-Z0-9_\-=/]|\{satellite_id\}|\{config\-name}|\{s3\-config-id}|\{year\}|\{month\}|\{day\}){1,900}$`

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](#)

S3RecordingDetails

Details about an S3 recording `Config` used in a contact.

Contents

bucketArn

ARN of the bucket used.

Type: String

Required: No

keyTemplate

Key template used for the S3 Recording Configuration

Type: String

Required: No

See Also

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

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

SatelliteListItem

Item in a list of satellites.

Contents

currentEphemeris

The current ephemeris being used to compute the trajectory of the satellite.

Type: EphemerisMetaData object

Required: No

groundStations

A list of ground stations to which the satellite is on-boarded.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 500 items.

Length Constraints: Minimum length of 4. Maximum length of 500.

Pattern: `^[ a-zA-Z0-9-._:=]{4,256}$`

Required: No

noradSatelliteID

NORAD satellite ID number.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 99999.

Required: No

satelliteArn

ARN of a satellite.

Type: String

Required: No

satelliteId

UUID of a satellite.

Type: String

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

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

Required: No

See Also

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

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

SecurityDetails

Information about endpoints.

Contents

roleArn

ARN to a role needed for connecting streams to your instances.

Type: String

Required: Yes

securityGroupIds

The security groups to attach to the elastic network interfaces.

Type: Array of strings

Required: Yes

subnetIds

A list of subnets where AWS Ground Station places elastic network interfaces to send streams to your instances.

Type: Array of strings

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](#)

SocketAddress

Information about the socket address.

Contents

name

Name of a socket address.

Type: String

Required: Yes

port

Port of a socket address.

Type: Integer

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](#)

Source

Dataflow details for the source side.

Contents

configDetails

Additional details for a `Config`, if type is `dataflow-endpoint` or `antenna-downlink-demod-decode`

Type: [ConfigDetails](#) object

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

Required: No

configId

UUID of a `Config`.

Type: String

Required: No

configType

Type of a `Config`.

Type: String

Valid Values: `antenna-downlink` | `antenna-downlink-demod-decode` | `antenna-uplink` | `dataflow-endpoint` | `tracking` | `uplink-echo` | `s3-recording`

Required: No

dataflowSourceRegion

Region of a dataflow source.

Type: String

Required: No

See Also

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

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

SpectrumConfig

Object that describes a spectral `Config`.

Contents

bandwidth

Bandwidth of a spectral `Config`. AWS Ground Station currently has the following bandwidth limitations:

- For `AntennaDownlinkDemodDecodeconfig`, valid values are between 125 kHz to 650 MHz.

- For `AntennaDownlinkconfig` valid values are between 10 kHz to 54 MHz.

- For `AntennaUplinkConfig`, valid values are between 10 kHz to 54 MHz.

Type: [FrequencyBandwidth](#) object

Required: Yes

centerFrequency

Center frequency of a spectral `Config`. Valid values are between 2200 to 2300 MHz and 7750 to 8400 MHz for downlink and 2025 to 2120 MHz for uplink.

Type: [Frequency](#) object

Required: Yes

polarization

Polarization of a spectral `Config`. Capturing both "RIGHT_HAND" and "LEFT_HAND" polarization requires two separate configs.

Type: String

Valid Values: `LEFT_HAND | NONE | RIGHT_HAND`

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

TimeRange

A time range with a start and end time.

Contents

endTime

Time in UTC at which the time range ends.

Type: Timestamp

Required: Yes

startTime

Time in UTC at which the time range starts.

Type: Timestamp

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

TLEData

Two-line element set (TLE) data.

Contents

tleLine1

First line of two-line element set (TLE) data.

Type: String

Length Constraints: Fixed length of 69.

Pattern: ^1 [0-9]{5}[A-Z] [0-9]{5}[A-Z]{3} [0-9]{5}[.][0-9]{8} (?:
(?:[0+-][.][0-9]{8})|(?: [+-][.][0-9]{7})) [+-][0-9]{5}[+-][0-9]
[+-][0-9]{5}[+-][0-9] [0-9] [0-9]{4}[0-9]$

Required: Yes

tleLine2

Second line of two-line element set (TLE) data.

Type: String

Length Constraints: Fixed length of 69.

Pattern: ^2 [0-9]{5} [0-9]{3}[.][0-9]{4} [0-9]{3}[.][0-9]{4} [0-9]
{7} [0-9]{3}[.][0-9]{4} [0-9]{3}[.][0-9]{4} [0-9]{2}[.][0-9]{13}
[0-9]$

Required: Yes

validTimeRange

The valid time range for the TLE. Gaps or overlap are not permitted.

Type: [TimeRange](#) object

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](#)

TLEEphemeris

Two-line element set (TLE) ephemeris.

Contents

s3Object

Identifies the S3 object to be used as the ephemeris.

Type: [S3Object](#) object

Required: No

tleData

The data for a TLE ephemeris, supplied directly in the request rather than through an S3 object.

Type: Array of [TLEData](#) objects

Array Members: Minimum number of 1 item. Maximum number of 500 items.

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](#)

TrackingConfig

Object that determines whether tracking should be used during a contact executed with this `Config` in the mission profile.

Contents

autotrack

Current setting for autotrack.

Type: String

Valid Values: PREFERRED | REMOVED | REQUIRED

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](#)

UplinkEchoConfig

Information about an uplink echo `Config`.

Parameters from the `AntennaUplinkConfig`, corresponding to the specified `AntennaUplinkConfigArn`, are used when this `UplinkEchoConfig` is used in a contact.

Contents

antennaUplinkConfigArn

ARN of an uplink `Config`.

Type: String

Required: Yes

enabled

Whether or not an uplink `Config` is enabled.

Type: Boolean

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

UplinkSpectrumConfig

Information about the uplink spectral `Config`.

Contents

centerFrequency

Center frequency of an uplink spectral `Config`. Valid values are between 2025 to 2120 MHz.

Type: [Frequency](#) object

Required: Yes

polarization

Polarization of an uplink spectral `Config`. Capturing both "RIGHT_HAND" and "LEFT_HAND" polarization requires two separate configs.

Type: String

Valid Values: `LEFT_HAND | NONE | RIGHT_HAND`

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