AWS Ground Station

API Reference

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.

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Actions

The following actions are supported:

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 (p. 3)

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 (p. 3)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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": {
        "antennaDownlinkConfig": {
            "spectrumConfig": {
                "bandwidth": {
                    "units": "string",
                    "value": number
                },
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            }
        },
        "antennaDownlinkDemodDecodeConfig": {
            "decodeConfig": {
                "unvalidatedJSON": "string"
            },
            "demodulationConfig": {
                "unvalidatedJSON": "string"
            },
            "spectrumConfig": {
                "bandwidth": {
                    "units": "string",
                    "value": number
                },
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            }
        },
        "antennaUplinkConfig": {
            "spectrumConfig": {
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            },
            "targetEirp": {
                "units": "string",
                "value": number
            },
            "transmitDisabled": boolean
        },
        "dataflowEndpointConfig": {
            "dataflowEndpointName": "string",
            "dataflowEndpointRegion": "string"
```

```
        },
        "s3RecordingConfig": {
            "bucketArn": "string",
            "prefix": "string",
            "roleArn": "string"
        },
        "trackingConfig": {
            "autotrack": "string"
        },
        "uplinkEchoConfig": {
            "antennaUplinkConfigArn": "string",
            "enabled": boolean
        }
    },
    "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 (p. 5)

> Parameters of a `Config`.
>
> Type: ConfigTypeData (p. 97) object
>
> Required: Yes

name (p. 5)

> 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 (p. 5)

> 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 (p. 6)

> ARN of a `Config`.
>
> Type: String

configId (p. 6)

> UUID of a `Config`.
>
> Type: String

configType (p. 6)

> 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 (p. 141).

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

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

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

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

{
   "endpointDetails": [
      {
         "endpoint": {
            "address": {
               "name": "string",
               "port": number
            },
            "mtu": number,
            "name": "string",
            "status": "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.

endpointDetails (p. 9)

Endpoint details of each endpoint in the dataflow endpoint group.

Type: Array of EndpointDetails (p. 110) objects

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

Required: Yes

tags (p. 9)

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 (p. 10)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- 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": {
      "oem": {
         "oemData": "string",
         "s3Object": {
            "bucket": "string",
            "key": "string",
            "version": "string"
         }
      },
      "tle": {
         "s3Object": {
            "bucket": "string",
            "key": "string",
            "version": "string"
         },
         "tleData": [
            {
               "tleLine1": "string",
               "tleLine2": "string",
               "validTimeRange": {
                  "endTime": number,
                  "startTime": number
               }
            }
         ]
      }
   },
   "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 (p. 12)

> 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 (p. 12)

Ephemeris data.

Type: EphemerisData (p. 111) object

Required: No

expirationTime (p. 12)

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

Type: Timestamp

Required: No

kmsKeyArn (p. 12)

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

Type: String

Required: No

name (p. 12)

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 (p. 12)

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 (p. 12)

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 (p. 12)

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 (p. 14)

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 (p. 141).

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
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- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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",
    "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 (p. 16)

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.

Required: No

contactPrePassDurationSeconds (p. 16)

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.

Required: No

dataflowEdges (p. 16)

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 (p. 16)

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 (p. 16)

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

tags (p. 16)

Tags assigned to a mission profile.

Type: String to string map

Required: No

trackingConfigArn (p. 16)

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 (p. 17)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 19)

> 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 (p. 19)

> 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 (p. 19)

> ARN of a `Config`.

Type: String

configId (p. 19)

UUID of a `Config`.

Type: String

configType (p. 19)

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 (p. 141).

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++
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- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- 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 (p. 21)

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 (p. 21)

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 (p. 141).

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
- 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 (p. 23)

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 (p. 23)

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 (p. 141).

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 C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 25)

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 (p. 25)

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 (p. 141).

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 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 (p. 27)

> 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": {
                    "antennaDemodDecodeDetails": {
                        "outputNode": "string"
                    },
                    "endpointDetails": {
                        "endpoint": {
                            "address": {
                                "name": "string",
                                "port": number
                            },
                            "mtu": number,
                            "name": "string",
                            "status": "string"
                        },
                        "securityDetails": {
                            "roleArn": "string",
                            "securityGroupIds": [ "string" ],
                            "subnetIds": [ "string" ]
                        }
```

```
                },
                "s3RecordingDetails": {
                    "bucketArn": "string",
                    "keyTemplate": "string"
                }
            },
            "configId": "string",
            "configType": "string",
            "dataflowDestinationRegion": "string"
        },
        "errorMessage": "string",
        "source": {
            "configDetails": {
                "antennaDemodDecodeDetails": {
                    "outputNode": "string"
                },
                "endpointDetails": {
                    "endpoint": {
                        "address": {
                            "name": "string",
                            "port": number
                        },
                        "mtu": number,
                        "name": "string",
                        "status": "string"
                    },
                    "securityDetails": {
                        "roleArn": "string",
                        "securityGroupIds": [ "string" ],
                        "subnetIds": [ "string" ]
                    }
                },
                "s3RecordingDetails": {
                    "bucketArn": "string",
                    "keyTemplate": "string"
                }
            },
            "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"
}
}
```

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 (p. 27)

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 (p. 27)

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 (p. 27)

List describing source and destination details for each dataflow edge.

Type: Array of DataflowDetail (p. 101) objects

endTime (p. 27)

End time of a contact in UTC.

Type: Timestamp

errorMessage (p. 27)

Error message for a contact.

Type: String

groundStation (p. 27)

Ground station for a contact.

Type: String

maximumElevation (p. 27)

Maximum elevation angle of a contact.

Type: Elevation (p. 109) object

missionProfileArn (p. 27)

ARN of a mission profile.

Type: String

postPassEndTime (p. 27)

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

Type: Timestamp

prePassStartTime (p. 27)

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

Type: Timestamp

region (p. 27)

Region of a contact.

Type: String

satelliteArn (p. 27)

ARN of a satellite.

Type: String

startTime (p. 27)

Start time of a contact in UTC.

Type: Timestamp

tags (p. 27)

Tags assigned to a contact.

Type: String to string map

Errors

For information about the errors that are common to all actions, see Common Errors (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 32)

    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": {
      "oem": {
         "ephemerisData": "string",
         "sourceS3Object": {
            "bucket": "string",
            "key": "string",
            "version": "string"
         }
      },
      "tle": {
         "ephemerisData": "string",
         "sourceS3Object": {
            "bucket": "string",
            "key": "string",
            "version": "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.

creationTime (p. 32)

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

enabled (p. 32)

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

ephemerisId (p. 32)

> 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 (p. 32)

> 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 (p. 32)

> 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 (p. 32)

> 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 (p. 32)

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 (p. 32)

The status of the ephemeris.

Type: String

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

suppliedData (p. 32)

Supplied ephemeris data.

Type: EphemerisTypeDescription (p. 117) object

tags (p. 32)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 36)

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 (p. 36)

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": {
      "antennaDownlinkConfig": {
         "spectrumConfig": {
            "bandwidth": {
               "units": "string",
               "value": number
            },
            "centerFrequency": {
               "units": "string",
               "value": number
            },
            "polarization": "string"
         }
```

```
        },
        "antennaDownlinkDemodDecodeConfig": {
            "decodeConfig": {
                "unvalidatedJSON": "string"
            },
            "demodulationConfig": {
                "unvalidatedJSON": "string"
            },
            "spectrumConfig": {
                "bandwidth": {
                    "units": "string",
                    "value": number
                },
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            }
        },
        "antennaUplinkConfig": {
            "spectrumConfig": {
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            },
            "targetEirp": {
                "units": "string",
                "value": number
            },
            "transmitDisabled": boolean
        },
        "dataflowEndpointConfig": {
            "dataflowEndpointName": "string",
            "dataflowEndpointRegion": "string"
        },
        "s3RecordingConfig": {
            "bucketArn": "string",
            "prefix": "string",
            "roleArn": "string"
        },
        "trackingConfig": {
            "autotrack": "string"
        },
        "uplinkEchoConfig": {
            "antennaUplinkConfigArn": "string",
            "enabled": boolean
        }
    },
    "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 (p. 36)

ARN of a `Config`

Type: String

configData (p. 36)

Data elements in a `Config`.

Type: ConfigTypeData (p. 97) object

configId (p. 36)

UUID of a `Config`.

Type: String

configType (p. 36)

Type of a `Config`.

Type: String

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

name (p. 36)

Name of a `Config`.

Type: String

tags (p. 36)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 40)

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

{
    "dataflowEndpointGroupArn": "string",
    "dataflowEndpointGroupId": "string",
    "endpointsDetails": [
        {
            "endpoint": {
                "address": {
                    "name": "string",
                    "port": number
                },
                "mtu": number,
                "name": "string",
                "status": "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.

dataflowEndpointGroupArn (p. 40)

    ARN of a dataflow endpoint group.

    Type: String

dataflowEndpointGroupId (p. 40)

    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 (p. 40)

    Details of a dataflow endpoint.

    Type: Array of EndpointDetails (p. 110) objects

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

tags (p. 40)

    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 (p. 141).

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

GetMinuteUsage

Returns the number of 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 (p. 43)

> 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 (p. 43)

> 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 (p. 43)

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

Type: Integer

isReservedMinutesCustomer (p. 43)

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

Type: Boolean

totalReservedMinuteAllocation (p. 43)

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

Type: Integer

totalScheduledMinutes (p. 43)

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

Type: Integer

upcomingMinutesScheduled (p. 43)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 46)

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",
    "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 (p. 46)

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 (p. 46)

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 (p. 46)

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 (p. 46)

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 (p. 46)

ARN of a mission profile.

Type: String

missionProfileId (p. 46)

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 (p. 46)

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 (p. 46)

Region of a mission profile.

Type: String

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

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

tags (p. 46)

Tags assigned to a mission profile.

Type: String to string map

trackingConfigArn (p. 46)

ARN of a tracking `Config`.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 49)

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 (p. 49)

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

Type: EphemerisMetaData (p. 115) object

groundStations (p. 49)

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 (p. 49)

NORAD satellite ID number.

Type: Integer

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

satelliteArn (p. 49)

ARN of a satellite.

Type: String

satelliteId (p. 49)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 52)

> Maximum number of `Configs` returned.
>
> Valid Range: Minimum value of 0. Maximum value of 100.

nextToken (p. 52)

> 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 (p. 52)

List of `Config` items.

Type: Array of ConfigListItem (p. 96) objects

nextToken (p. 52)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 54)

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

groundStation (p. 54)

> 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 (p. 54)

> Maximum number of contacts returned.
>
> Type: Integer
>
> Valid Range: Minimum value of 0. Maximum value of 100.

Required: No

missionProfileArn (p. 54)

ARN of a mission profile.

Type: String

Required: No

nextToken (p. 54)

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 (p. 54)

ARN of a satellite.

Type: String

Required: No

startTime (p. 54)

Start time of a contact in UTC.

Type: Timestamp

Required: Yes

statusList (p. 54)

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"
            }
        }
    ],
    "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 (p. 55)

> List of contacts.

> Type: Array of ContactData (p. 99) objects

nextToken (p. 55)

> 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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 58)

> Maximum number of dataflow endpoint groups returned.
>
> Valid Range: Minimum value of 0. Maximum value of 100.

nextToken (p. 58)

> 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 (p. 58)

> A list of dataflow endpoint groups.

Type: Array of DataflowEndpointListItem (p. 104) objects

nextToken (p. 58)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 60)

> Maximum number of ephemerides to return.
>
> Valid Range: Minimum value of 0. Maximum value of 100.

nextToken (p. 60)

> 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 (p. 60)

> 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 (p. 60)

> 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 (p. 60)

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 (p. 60)

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 (p. 61)

List of ephemerides.

Type: Array of EphemerisItem (p. 113) objects

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

nextToken (p. 61)

> 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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 63)

Maximum number of ground stations returned.

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

nextToken (p. 63)

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 (p. 63)

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 (p. 63)

> List of ground stations.

> Type: Array of GroundStationData (p. 120) objects

nextToken (p. 63)

> 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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 66)

> Maximum number of mission profiles returned.
>
> Valid Range: Minimum value of 0. Maximum value of 100.

nextToken (p. 66)

> 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 (p. 66)

List of mission profiles.

Type: Array of MissionProfileListItem (p. 121) objects

nextToken (p. 66)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 68)

> Maximum number of satellites returned.
>
> Valid Range: Minimum value of 0. Maximum value of 100.

nextToken (p. 68)

> 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 (p. 68)

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 (p. 68)

List of satellites.

Type: Array of SatelliteListItem (p. 127) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 70)

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 (p. 70)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 72)

>   End time of a contact in UTC.

>   Type: Timestamp

>   Required: Yes

groundStation (p. 72)

>   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 (p. 72)

>   ARN of a mission profile.

>   Type: String

>   Required: Yes

satelliteArn (p. 72)

>   ARN of a satellite

Type: String

Required: Yes

startTime (p. 72)

Start time of a contact in UTC.

Type: Timestamp

Required: Yes

tags (p. 72)

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 (p. 73)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 75)

>   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 (p. 75)

>   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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 77)

ARN of a resource.

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

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

Required: Yes

tagKeys (p. 77)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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": {
        "antennaDownlinkConfig": {
            "spectrumConfig": {
                "bandwidth": {
                    "units": "string",
                    "value": number
                },
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            }
        },
        "antennaDownlinkDemodDecodeConfig": {
            "decodeConfig": {
                "unvalidatedJSON": "string"
            },
            "demodulationConfig": {
                "unvalidatedJSON": "string"
            },
            "spectrumConfig": {
                "bandwidth": {
                    "units": "string",
                    "value": number
                },
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            }
        },
        "antennaUplinkConfig": {
            "spectrumConfig": {
                "centerFrequency": {
                    "units": "string",
                    "value": number
                },
                "polarization": "string"
            },
            "targetEirp": {
                "units": "string",
                "value": number
            },
            "transmitDisabled": boolean
        },
        "dataflowEndpointConfig": {
            "dataflowEndpointName": "string",
```

```
            "dataflowEndpointRegion": "string"
        },
        "s3RecordingConfig": {
            "bucketArn": "string",
            "prefix": "string",
            "roleArn": "string"
        },
        "trackingConfig": {
            "autotrack": "string"
        },
        "uplinkEchoConfig": {
            "antennaUplinkConfigArn": "string",
            "enabled": boolean
        }
    },
    "name": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

configId (p. 79)

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 (p. 79)

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 (p. 79)

Parameters of a `Config`.

Type: ConfigTypeData (p. 97) object

Required: Yes

name (p. 79)

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 (p. 81)

ARN of a Config.

Type: String

configId (p. 81)

UUID of a Config.

Type: String

configType (p. 81)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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 (p. 83)

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 (p. 83)

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

Type: Boolean

Required: Yes

name (p. 83)

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 (p. 83)

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 (p. 84)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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",
   "trackingConfigArn": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

missionProfileId (p. 86)

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 (p. 86)

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.

Required: No

contactPrePassDurationSeconds (p. 86)

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.

Required: No

dataflowEdges (p. 86)

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 (p. 86)

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 (p. 86)

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

trackingConfigArn (p. 86)

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 (p. 87)

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 (p. 141).

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- 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:

- AntennaDemodDecodeDetails (p. 91)
- AntennaDownlinkConfig (p. 92)
- AntennaDownlinkDemodDecodeConfig (p. 93)
- AntennaUplinkConfig (p. 94)
- ConfigDetails (p. 95)
- ConfigListItem (p. 96)
- ConfigTypeData (p. 97)
- ContactData (p. 99)
- DataflowDetail (p. 101)
- DataflowEndpoint (p. 102)
- DataflowEndpointConfig (p. 103)
- DataflowEndpointListItem (p. 104)
- DecodeConfig (p. 105)
- DemodulationConfig (p. 106)
- Destination (p. 107)
- Eirp (p. 108)
- Elevation (p. 109)
- EndpointDetails (p. 110)
- EphemerisData (p. 111)
- EphemerisDescription (p. 112)
- EphemerisItem (p. 113)
- EphemerisMetaData (p. 115)
- EphemerisTypeDescription (p. 117)
- Frequency (p. 118)
- FrequencyBandwidth (p. 119)
- GroundStationData (p. 120)
- MissionProfileListItem (p. 121)
- OEMEphemeris (p. 123)
- S3Object (p. 124)
- S3RecordingConfig (p. 125)
- S3RecordingDetails (p. 126)
- SatelliteListItem (p. 127)
- SecurityDetails (p. 129)
- SocketAddress (p. 130)
- Source (p. 131)

- SpectrumConfig (p. 132)
- TimeRange (p. 133)
- TLEData (p. 134)
- TLEEphemeris (p. 135)
- TrackingConfig (p. 136)
- UplinkEchoConfig (p. 137)
- UplinkSpectrumConfig (p. 138)

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 Go
- 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 (p. 132) 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 Go
- 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 (p. 105) object

Required: Yes

demodulationConfig

Information about the demodulation `Config`.

Type: DemodulationConfig (p. 106) object

Required: Yes

spectrumConfig

Information about the spectral `Config`.

Type: SpectrumConfig (p. 132) 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 Go
- 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 (p. 138) object

Required: Yes

targetEirp

EIRP of the target.

Type: Eirp (p. 108) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

ConfigDetails

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

Contents

antennaDemodDecodeDetails

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

Type: AntennaDemodDecodeDetails (p. 91) object

Required: No

endpointDetails

Information about the endpoint details.

Type: EndpointDetails (p. 110) object

Required: No

s3RecordingDetails

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

Type: S3RecordingDetails (p. 126) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 Go
- 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

antennaDownlinkConfig

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

Type: AntennaDownlinkConfig (p. 92) object

Required: No

antennaDownlinkDemodDecodeConfig

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

Type: AntennaDownlinkDemodDecodeConfig (p. 93) object

Required: No

antennaUplinkConfig

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

Type: AntennaUplinkConfig (p. 94) object

Required: No

dataflowEndpointConfig

Information about the dataflow endpoint `Config`.

Type: DataflowEndpointConfig (p. 103) object

Required: No

s3RecordingConfig

Information about an S3 recording `Config`.

Type: S3RecordingConfig (p. 125) 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 (p. 136) 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 (p. 137) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 (p. 109) 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

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 (p. 107) object

Required: No

errorMessage

Error message for a dataflow.

Type: String

Required: No

source

Dataflow details for the source side.

Type: Source (p. 131) object

Required: No

See Also

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

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

DataflowEndpoint

Information about a dataflow endpoint.

Contents

address

Socket address of a dataflow endpoint.

Type: SocketAddress (p. 130) 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 Go
- 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 Go
- 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 Go
- 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 Go
- 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 Go
- 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 (p. 95) object

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 Go
- 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 Go
- 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EndpointDetails

Information about the endpoint details.

Contents

endpoint

A dataflow endpoint.

Type: DataflowEndpoint (p. 102) object

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 (p. 129) object

Required: No

See Also

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

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

EphemerisData

Ephemeris data.

Contents

oem

Ephemeris data in Orbit Ephemeris Message (OEM) format.

Type: OEMEphemeris (p. 123) object

Required: No

tle

Two-line element set (TLE) ephemeris.

Type: TLEEphemeris (p. 135) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 (p. 124) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 (p. 124) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3

EphemerisMetaData

Metadata describing a particular ephemeris.

Contents

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

source

The `EphemerisSource` that generated a given ephemeris.

Type: String

Valid Values: `CUSTOMER_PROVIDED | SPACE_TRACK`

Required: Yes

See Also

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

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

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

EphemerisTypeDescription

Contents

oem

Description of ephemeris.

Type: EphemerisDescription (p. 112) object

Required: No

tle

Description of ephemeris.

Type: EphemerisDescription (p. 112) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 Go
- 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 Go](#)
- [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 Go
- 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 Go
- 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 (p. 124) object

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 Go
- 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

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

roleArn

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

Type: String

Required: Yes

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java 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 Go
- 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 (p. 115) 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 Go
- 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 Go
- 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 Go
- 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 (p. 95) object

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 Go
- 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 (p. 119) 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 (p. 118) 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 Go
- 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 Go
- 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 (p. 133) 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 Go
- 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 (p. 124) 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 (p. 134) 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 Go
- 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 Go
- 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 Go
- 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 (p. 118) 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 Go
- 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 Signature Version 4 Signing Process in the *Amazon Web Services General Reference*.

Action

> The action to be performed.
>
> Type: string
>
> Required: Yes

Version

> The API version that the request is written for, expressed in the format YYYY-MM-DD.
>
> Type: string
>
> Required: Yes

X-Amz-Algorithm

> The hash algorithm that you used to create the request signature.
>
> Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
>
> Type: string
>
> Valid Values: `AWS4-HMAC-SHA256`
>
> Required: Conditional

X-Amz-Credential

> The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/aws4_request.
>
> For more information, see Task 2: Create a String to Sign for Signature Version 4 in the *Amazon Web Services General Reference*.
>
> Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
>
> Type: string
>
> Required: Conditional

X-Amz-Date

> The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.
>
> Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the *Amazon Web Services General Reference*.

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

Type: string

Required: Conditional

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

InvalidQueryParameter

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400