



API Reference

AWS Ground Station



API Version 2019-05-23

Copyright © 2026 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

AWS Ground Station: API Reference

Copyright © 2026 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

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

Table of Contents

Welcome	1
Actions	2
CancelContact	4
Request Syntax	4
URI Request Parameters	4
Request Body	4
Response Syntax	4
Response Elements	5
Errors	5
See Also	6
CreateConfig	7
Request Syntax	7
URI Request Parameters	7
Request Body	7
Response Syntax	8
Response Elements	8
Errors	9
See Also	10
CreateDataflowEndpointGroup	11
Request Syntax	11
URI Request Parameters	12
Request Body	12
Response Syntax	14
Response Elements	14
Errors	14
See Also	15
CreateDataflowEndpointGroupV2	16
Request Syntax	16
URI Request Parameters	16
Request Body	16
Response Syntax	17
Response Elements	18
Errors	18
See Also	19

CreateEphemeris	20
Request Syntax	20
URI Request Parameters	20
Request Body	20
Response Syntax	22
Response Elements	22
Errors	23
See Also	23
CreateMissionProfile	25
Request Syntax	25
URI Request Parameters	25
Request Body	25
Response Syntax	28
Response Elements	28
Errors	29
See Also	29
DeleteConfig	31
Request Syntax	31
URI Request Parameters	31
Request Body	31
Response Syntax	31
Response Elements	32
Errors	32
See Also	33
DeleteDataflowEndpointGroup	35
Request Syntax	35
URI Request Parameters	35
Request Body	35
Response Syntax	35
Response Elements	35
Errors	36
See Also	36
DeleteEphemeris	38
Request Syntax	38
URI Request Parameters	38
Request Body	38

Response Syntax	38
Response Elements	38
Errors	39
See Also	40
DeleteMissionProfile	41
Request Syntax	41
URI Request Parameters	41
Request Body	41
Response Syntax	41
Response Elements	41
Errors	42
See Also	42
DescribeContact	44
Request Syntax	44
URI Request Parameters	44
Request Body	44
Response Syntax	44
Response Elements	46
Errors	49
See Also	49
DescribeContactVersion	51
Request Syntax	51
URI Request Parameters	51
Request Body	51
Response Syntax	51
Response Elements	53
Errors	56
See Also	56
DescribeEphemeris	58
Request Syntax	58
URI Request Parameters	58
Request Body	58
Response Syntax	58
Response Elements	59
Errors	61
See Also	62

GetAgentConfiguration	63
Request Syntax	63
URI Request Parameters	63
Request Body	63
Response Syntax	63
Response Elements	64
Errors	64
See Also	65
GetAgentTaskResponseUrl	66
Request Syntax	66
URI Request Parameters	66
Request Body	66
Response Syntax	67
Response Elements	67
Errors	68
See Also	68
GetConfig	70
Request Syntax	70
URI Request Parameters	70
Request Body	70
Response Syntax	70
Response Elements	71
Errors	72
See Also	73
GetDataflowEndpointGroup	74
Request Syntax	74
URI Request Parameters	74
Request Body	74
Response Syntax	74
Response Elements	76
Errors	77
See Also	78
GetMinuteUsage	79
Request Syntax	79
URI Request Parameters	79
Request Body	79

Response Syntax	80
Response Elements	80
Errors	81
See Also	81
GetMissionProfile	83
Request Syntax	83
URI Request Parameters	83
Request Body	83
Response Syntax	83
Response Elements	84
Errors	87
See Also	87
GetSatellite	89
Request Syntax	89
URI Request Parameters	89
Request Body	89
Response Syntax	89
Response Elements	90
Errors	91
See Also	91
ListAntennas	93
Request Syntax	93
URI Request Parameters	93
Request Body	93
Response Syntax	94
Response Elements	94
Errors	94
See Also	95
ListConfigs	96
Request Syntax	96
URI Request Parameters	96
Request Body	96
Response Syntax	96
Response Elements	97
Errors	97
See Also	98

ListContacts	99
Request Syntax	99
URI Request Parameters	99
Request Body	99
Response Syntax	101
Response Elements	103
Errors	103
See Also	104
ListContactVersions	105
Request Syntax	105
URI Request Parameters	105
Request Body	105
Response Syntax	106
Response Elements	106
Errors	107
See Also	107
ListDataflowEndpointGroups	109
Request Syntax	109
URI Request Parameters	109
Request Body	109
Response Syntax	109
Response Elements	110
Errors	110
See Also	111
ListEphemerides	112
Request Syntax	112
URI Request Parameters	112
Request Body	112
Response Syntax	114
Response Elements	114
Errors	115
See Also	115
ListGroundStationReservations	117
Request Syntax	117
URI Request Parameters	117
Request Body	118

Response Syntax	118
Response Elements	118
Errors	119
See Also	120
ListGroundStations	121
Request Syntax	121
URI Request Parameters	121
Request Body	121
Response Syntax	121
Response Elements	122
Errors	122
See Also	123
ListMissionProfiles	124
Request Syntax	124
URI Request Parameters	124
Request Body	124
Response Syntax	124
Response Elements	125
Errors	125
See Also	126
ListSatellites	127
Request Syntax	127
URI Request Parameters	127
Request Body	127
Response Syntax	127
Response Elements	128
Errors	128
See Also	129
ListTagsForResource	130
Request Syntax	130
URI Request Parameters	130
Request Body	130
Response Syntax	130
Response Elements	130
Errors	131
See Also	131

RegisterAgent	133
Request Syntax	133
URI Request Parameters	133
Request Body	134
Response Syntax	134
Response Elements	134
Errors	135
See Also	135
ReserveContact	137
Request Syntax	137
URI Request Parameters	137
Request Body	137
Response Syntax	139
Response Elements	139
Errors	140
See Also	140
TagResource	142
Request Syntax	142
URI Request Parameters	142
Request Body	142
Response Syntax	143
Response Elements	143
Errors	143
See Also	143
UntagResource	145
Request Syntax	145
URI Request Parameters	145
Request Body	145
Response Syntax	145
Response Elements	146
Errors	146
See Also	146
UpdateAgentStatus	148
Request Syntax	148
URI Request Parameters	148
Request Body	149

Response Syntax	149
Response Elements	150
Errors	150
See Also	151
UpdateConfig	152
Request Syntax	152
URI Request Parameters	152
Request Body	153
Response Syntax	153
Response Elements	153
Errors	154
See Also	155
UpdateContact	156
Request Syntax	156
URI Request Parameters	156
Request Body	156
Response Syntax	157
Response Elements	157
Errors	158
See Also	159
UpdateEphemeris	160
Request Syntax	160
URI Request Parameters	160
Request Body	160
Response Syntax	161
Response Elements	161
Errors	162
See Also	162
UpdateMissionProfile	164
Request Syntax	164
URI Request Parameters	164
Request Body	164
Response Syntax	167
Response Elements	167
Errors	168
See Also	168

Data Types	170
AgentDetails	174
Contents	174
See Also	175
AggregateStatus	176
Contents	176
See Also	176
AntennaDemodDecodeDetails	177
Contents	177
See Also	177
AntennaDownlinkConfig	178
Contents	178
See Also	178
AntennaDownlinkDemodDecodeConfig	179
Contents	179
See Also	179
AntennaListItem	180
Contents	180
See Also	181
AntennaUplinkConfig	182
Contents	182
See Also	182
AwsGroundStationAgentEndpoint	183
Contents	183
See Also	184
AzElEphemeris	185
Contents	185
See Also	186
AzElEphemerisFilter	187
Contents	187
See Also	187
AzElProgramTrackSettings	188
Contents	188
See Also	188
AzElSegment	189
Contents	189

See Also	190
AzElSegments	191
Contents	191
See Also	191
AzElSegmentsData	193
Contents	193
See Also	193
ComponentStatusData	195
Contents	195
See Also	196
ComponentVersion	197
Contents	197
See Also	197
ConfigDetails	198
Contents	198
See Also	198
ConfigListItem	200
Contents	200
See Also	201
ConfigTypeData	202
Contents	202
See Also	203
ConnectionDetails	205
Contents	205
See Also	205
ContactData	206
Contents	206
See Also	209
ContactReservationDetails	210
Contents	210
See Also	210
ContactVersion	211
Contents	211
See Also	212
CreateEndpointDetails	214
Contents	214

See Also	214
DataflowDetail	215
Contents	215
See Also	215
DataflowEndpoint	216
Contents	216
See Also	217
DataflowEndpointConfig	218
Contents	218
See Also	218
DataflowEndpointListItem	219
Contents	219
See Also	219
DecodeConfig	220
Contents	220
See Also	220
DemodulationConfig	221
Contents	221
See Also	221
Destination	222
Contents	222
See Also	223
DiscoveryData	224
Contents	224
See Also	225
DownlinkAwsGroundStationAgentEndpoint	226
Contents	226
See Also	226
DownlinkAwsGroundStationAgentEndpointDetails	227
Contents	227
See Also	228
DownlinkConnectionDetails	229
Contents	229
See Also	229
DownlinkDataflowDetails	230
Contents	230

See Also	230
Eirp	231
Contents	231
See Also	231
Elevation	232
Contents	232
See Also	232
EndpointDetails	233
Contents	233
See Also	234
EphemerisData	235
Contents	235
See Also	236
EphemerisDescription	237
Contents	237
See Also	237
EphemerisErrorReason	238
Contents	238
See Also	239
EphemerisFilter	240
Contents	240
See Also	240
EphemerisItem	241
Contents	241
See Also	242
EphemerisMetaData	244
Contents	244
See Also	245
EphemerisResponseData	246
Contents	246
See Also	246
EphemerisTypeDescription	247
Contents	247
See Also	247
Frequency	249
Contents	249

See Also	249
FrequencyBandwidth	250
Contents	250
See Also	250
GroundStationData	251
Contents	251
See Also	252
GroundStationReservationListItem	253
Contents	253
See Also	254
IntegerRange	255
Contents	255
See Also	255
ISO8601TimeRange	256
Contents	256
See Also	256
KinesisDataStreamData	257
Contents	257
See Also	257
KmsKey	258
Contents	258
See Also	259
MaintenanceReservationDetails	260
Contents	260
See Also	260
MissionProfileListItem	261
Contents	261
See Also	262
OEMePhemeris	263
Contents	263
See Also	263
OemProgramTrackSettings	264
Contents	264
See Also	264
ProgramTrackSettings	265
Contents	265

See Also	265
RangedConnectionDetails	267
Contents	267
See Also	267
RangedSocketAddress	268
Contents	268
See Also	268
ReservationDetails	269
Contents	269
See Also	269
S3Object	270
Contents	270
See Also	271
S3RecordingConfig	272
Contents	272
See Also	272
S3RecordingDetails	274
Contents	274
See Also	274
SatelliteListItem	275
Contents	275
See Also	276
SecurityDetails	277
Contents	277
See Also	277
SocketAddress	279
Contents	279
See Also	279
Source	280
Contents	280
See Also	281
SpectrumConfig	282
Contents	282
See Also	282
TelemetrySinkConfig	284
Contents	284

See Also	284
TelemetrySinkData	285
Contents	285
See Also	285
TimeAzEl	286
Contents	286
See Also	287
TimeRange	288
Contents	288
See Also	288
TLEData	289
Contents	289
See Also	290
TLEEphemeris	291
Contents	291
See Also	291
TleProgramTrackSettings	292
Contents	292
See Also	292
TrackingConfig	293
Contents	293
See Also	293
TrackingOverrides	294
Contents	294
See Also	294
UplinkAwsGroundStationAgentEndpoint	295
Contents	295
See Also	295
UplinkAwsGroundStationAgentEndpointDetails	296
Contents	296
See Also	297
UplinkConnectionDetails	298
Contents	298
See Also	298
UplinkDataflowDetails	299
Contents	299

See Also	299
UplinkEchoConfig	300
Contents	300
See Also	300
UplinkSpectrumConfig	301
Contents	301
See Also	301
Common Parameters	302
Common Error Types	305

Welcome

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

This document was last published on April 22, 2026.

Actions

The following actions are supported:

- [CancelContact](#)
- [CreateConfig](#)
- [CreateDataflowEndpointGroup](#)
- [CreateDataflowEndpointGroupV2](#)
- [CreateEphemeris](#)
- [CreateMissionProfile](#)
- [DeleteConfig](#)
- [DeleteDataflowEndpointGroup](#)
- [DeleteEphemeris](#)
- [DeleteMissionProfile](#)
- [DescribeContact](#)
- [DescribeContactVersion](#)
- [DescribeEphemeris](#)
- [GetAgentConfiguration](#)
- [GetAgentTaskResponseUrl](#)
- [GetConfig](#)
- [GetDataflowEndpointGroup](#)
- [GetMinuteUsage](#)
- [GetMissionProfile](#)
- [GetSatellite](#)
- [ListAntennas](#)
- [ListConfigs](#)
- [ListContacts](#)
- [ListContactVersions](#)
- [ListDataflowEndpointGroups](#)
- [ListEphemerides](#)
- [ListGroundStationReservations](#)

- [ListGroundStations](#)
- [ListMissionProfiles](#)
- [ListSatellites](#)
- [ListTagsForResource](#)
- [RegisterAgent](#)
- [ReserveContact](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAgentStatus](#)
- [UpdateConfig](#)
- [UpdateContact](#)
- [UpdateEphemeris](#)
- [UpdateMissionProfile](#)

CancelContact

Cancels or stops a contact with a specified contact ID based on its position in the [contact lifecycle](#).

For contacts that:

- Have yet to start, the contact will be cancelled.
- Have started but have yet to finish, the contact will be stopped.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

[contactId](#)

UUID of a contact.

Length Constraints: Fixed length of 36.

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,
  "versionId": number
```

```
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

versionId

Version ID of a contact.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 128.

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateConfig

Creates a Config with the specified configData parameters.

Only one type of configData can be specified.

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

configData

Parameters of a Config.

Type: [ConfigTypeData](#) object

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

Required: Yes

name

Name of a Config.

Type: String

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

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

Required: Yes

tags

Tags assigned to a Config.

Type: String to string map

Required: No

Response Syntax

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

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

Response Elements

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

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

configArn

ARN of a Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?

configId

UUID of a Config.

Type: String

configType

Type of a Config.

Type: String

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

ResourceLimitExceededException

Account limits for this resource have been exceeded.

parameterName

Name of the parameter that exceeded the resource limit.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [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
```

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

```

    },
    "downlinkAwsGroundStationAgentEndpoint": {
      "agentStatus": "string",
      "auditResults": "string",
      "dataflowDetails": { ... },
      "name": "string"
    },
    "endpoint": {
      "address": {
        "name": "string",
        "port": number
      },
      "mtu": number,
      "name": "string",
      "status": "string"
    },
    "healthReasons": [ "string" ],
    "healthStatus": "string",
    "securityDetails": {
      "roleArn": "string",
      "securityGroupIds": [ "string" ],
      "subnetIds": [ "string" ]
    },
    "uplinkAwsGroundStationAgentEndpoint": {
      "agentStatus": "string",
      "auditResults": "string",
      "dataflowDetails": { ... },
      "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.

contactPostPassDurationSeconds

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

Required: No

contactPrePassDurationSeconds

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

Required: No

endpointDetails

Endpoint details of each endpoint in the dataflow endpoint group. All dataflow endpoints within a single dataflow endpoint group must be of the same type. You cannot mix [AWS Ground Station Agent endpoints](#) with [Dataflow endpoints](#) in the same group. If your use case requires both types of endpoints, you must create separate dataflow endpoint groups for each type.

Type: Array of [EndpointDetails](#) objects

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

Required: Yes

tags

Tags of a dataflow endpoint group.

Type: String to string map

Required: No

Response Syntax

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

{
  "dataflowEndpointGroupId": "string"
}
```

Response Elements

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

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

[dataflowEndpointGroupId](#)

UUID of a dataflow endpoint group.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateDataflowEndpointGroupV2

Creates a DataflowEndpoint group containing the specified list of Ground Station Agent based endpoints.

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 /dataflowEndpointGroupV2 HTTP/1.1
Content-type: application/json

{
  "contactPostPassDurationSeconds": number,
  "contactPrePassDurationSeconds": number,
  "endpoints": [
    { ... }
  ],
  "tags": {
    "string" : "string"
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

contactPostPassDurationSeconds

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

Required: No

contactPrePassDurationSeconds

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

Required: No

endpoints

Dataflow endpoint group's endpoint definitions

Type: Array of [CreateEndpointDetails](#) objects

Array Members: Minimum number of 1 item. Maximum number of 12 items.

Required: Yes

tags

Tags of a V2 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](#)

Dataflow endpoint group ID

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

ResourceNotFoundException

Resource was not found.

HTTP Status Code: 434

ServiceQuotaExceededException

Request would cause a service quota to be exceeded.

parameterName

Parameter name that caused the exception

HTTP Status Code: 402

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateEphemeris

Create an ephemeris with your specified [EphemerisData](#).

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

[enabled](#)

Set to `true` to enable the ephemeris after validation. Set to `false` to keep it disabled.

Type: Boolean

Required: No

[ephemeris](#)

Ephemeris data.

Type: [EphemerisData](#) object

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

Required: No

[expirationTime](#)

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

Type: Timestamp

Required: No

[kmsKeyArn](#)

The ARN of the KMS key to use for encrypting the ephemeris.

Type: String

Required: No

[name](#)

A name that you can use to identify the ephemeris.

Type: String

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

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

Required: Yes

[priority](#)

A priority score that determines which ephemeris to use when multiple ephemerides overlap.

Higher numbers take precedence. The default is 1. Must be 1 or greater.

Type: Integer

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

Required: No

satelliteId

The satellite ID that associates this ephemeris with a satellite in AWS Ground Station.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

tags

Tags assigned to an ephemeris.

Type: String to string map

Required: No

Response Syntax

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

```
{
  "ephemerisId": "string"
}
```

Response Elements

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

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

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

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

CreateMissionProfile

Creates a mission profile.

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

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

[contactPostPassDurationSeconds](#)

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

Type: Integer

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

Required: No

contactPrePassDurationSeconds

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

Type: Integer

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

Required: No

dataflowEdges

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

Type: Array of arrays of strings

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

Array Members: Fixed number of 2 items.

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: Yes

minimumViableContactDurationSeconds

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

Type: Integer

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

Required: Yes

name

Name of a mission profile.

Type: String

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

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

Required: Yes

streamsKmsKey

KMS key to use for encrypting streams.

Type: [KmsKey](#) object

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

Required: No

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: arn:[a-z0-9-]{1,63}:iam::[0-9]{12}:role/[\w+=,.\@-]{1,64}

Required: No

tags

Tags assigned to a mission profile.

Type: String to string map

Required: No

telemetrySinkConfigArn

ARN of a telemetry sink Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: No

[trackingConfigArn](#)

ARN of a tracking Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: Yes

Response Syntax

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

{
  "missionProfileId": "string"
}
```

Response Elements

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

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

[missionProfileId](#)

UUID of a mission profile.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

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

DeleteConfig

Deletes a Config.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a Config.

Length Constraints: Fixed length of 36.

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

Required: Yes

configType

Type of a Config.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

Response Elements

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

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

configArn

ARN of a Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

configId

UUID of a Config.

Type: String

configType

Type of a Config.

Type: String

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [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

UUID of a dataflow endpoint group.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "dataflowEndpointGroupId": "string"
}
```

Response Elements

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

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

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteEphemeris

Delete an ephemeris.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

[ephemerisId](#)

The AWS Ground Station ephemeris ID.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "ephemerisId": "string"
}
```

Response Elements

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

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

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

ResourceInUseException

The specified resource is in use by non-terminal state contacts and cannot be modified or deleted.

HTTP Status Code: 409

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteMissionProfile

Deletes a mission profile.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "missionProfileId": "string"
}
```

Response Elements

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

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

missionProfileId

UUID of a mission profile.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeContact

Describes an existing contact.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

```
    "errorMessage": "string",
    "source": {
      "configDetails": { ... },
      "configId": "string",
      "configType": "string",
      "dataflowSourceRegion": "string"
    }
  ],
  "endTime": number,
  "ephemeris": {
    "ephemerisId": "string",
    "ephemerisType": "string"
  },
  "errorMessage": "string",
  "groundStation": "string",
  "maximumElevation": {
    "unit": "string",
    "value": number
  },
  "missionProfileArn": "string",
  "postPassEndTime": number,
  "prePassStartTime": number,
  "region": "string",
  "satelliteArn": "string",
  "startTime": number,
  "tags": {
    "string" : "string"
  },
  "trackingOverrides": {
    "programTrackSettings": { ... }
  },
  "version": {
    "activated": number,
    "created": number,
    "failureCodes": [ "string" ],
    "failureMessage": "string",
    "lastUpdated": number,
    "status": "string",
    "superseded": number,
    "versionId": number
  },
  "visibilityEndTime": number,
  "visibilityStartTime": number
```

```
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

contactStatus

Status of a contact.

Type: String

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

dataflowList

List describing source and destination details for each dataflow edge.

Type: Array of [DataflowDetail](#) objects

endTime

End time of a contact in UTC.

Type: Timestamp

ephemeris

The ephemeris that determines antenna pointing directions for the contact.

Type: [EphemerisResponseData](#) object

errorMessage

Error message for a contact.

Type: String

groundStation

Ground station for a contact.

Type: String

maximumElevation

Maximum elevation angle of a contact.

Type: [Elevation](#) object

missionProfileArn

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

postPassEndTime

End time in UTC of the post-pass period, at which you receive a CloudWatch event indicating the pass has finished.

Type: Timestamp

prePassStartTime

Start time in UTC of the pre-pass period, at which you receive a CloudWatch event indicating an upcoming pass.

Type: Timestamp

region

Region where the `ReserveContact` API was called to schedule this contact.

Type: String

satelliteArn

ARN of a satellite.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[-a-f0-9]{8}-[-a-f0-9]{4}-[-a-f0-9]{4}-[-a-f0-9]{4}-[-a-f0-9]{12}`

startTime

Start time of a contact in UTC.

Type: Timestamp

tags

Tags assigned to a contact.

Type: String to string map

trackingOverrides

Tracking configuration overrides specified when the contact was reserved.

Type: [TrackingOverrides](#) object

version

Version information for a contact.

Type: [ContactVersion](#) object

visibilityEndTime

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

Type: Timestamp

visibilityStartTime

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

Type: Timestamp

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

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

DescribeContactVersion

Describes a specific version of a contact.

Request Syntax

```
GET /contact/contactId/versions/versionId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

Length Constraints: Fixed length of 36.

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

Required: Yes

versionId

Version ID of a contact.

Valid Range: Minimum value of 1. Maximum value of 128.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "contactId": "string",
  "contactStatus": "string",
  "dataflowList": [
```

```

    {
      "destination": {
        "configDetails": { ... },
        "configId": "string",
        "configType": "string",
        "dataflowDestinationRegion": "string"
      },
      "errorMessage": "string",
      "source": {
        "configDetails": { ... },
        "configId": "string",
        "configType": "string",
        "dataflowSourceRegion": "string"
      }
    }
  ],
  "endTime": number,
  "ephemeris": {
    "ephemerisId": "string",
    "ephemerisType": "string"
  },
  "errorMessage": "string",
  "groundStation": "string",
  "maximumElevation": {
    "unit": "string",
    "value": number
  },
  "missionProfileArn": "string",
  "postPassEndTime": number,
  "prePassStartTime": number,
  "region": "string",
  "satelliteArn": "string",
  "startTime": number,
  "tags": {
    "string" : "string"
  },
  "trackingOverrides": {
    "programTrackSettings": { ... }
  },
  "version": {
    "activated": number,
    "created": number,
    "failureCodes": [ "string" ],
    "failureMessage": "string",

```

```
    "lastUpdated": number,
    "status": "string",
    "superseded": number,
    "versionId": number
  },
  "visibilityEndTime": number,
  "visibilityStartTime": number
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

contactStatus

Status of a contact.

Type: String

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

dataflowList

List describing source and destination details for each dataflow edge.

Type: Array of [DataflowDetail](#) objects

endTime

End time of a contact in UTC.

Type: Timestamp

ephemeris

The ephemeris that determines antenna pointing directions for the contact.

Type: [EphemerisResponseData](#) object

errorMessage

Error message for a contact.

Type: String

groundStation

Ground station for a contact.

Type: String

maximumElevation

Maximum elevation angle of a contact.

Type: [Elevation](#) object

missionProfileArn

ARN of the contact's mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

postPassEndTime

End time in UTC of the post-pass period, at which you receive a CloudWatch event indicating the pass has finished.

Type: Timestamp

prePassStartTime

Start time in UTC of the pre-pass period, at which you receive a CloudWatch event indicating an upcoming pass.

Type: Timestamp

region

Region where the ReserveContact API was called to schedule this contact.

Type: String

satelliteArn

ARN of a satellite.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

startTime

Start time of a contact in UTC.

Type: Timestamp

tags

Tags assigned to a contact.

Type: String to string map

trackingOverrides

Tracking configuration overrides applied to this contact version. For the initial version, these are the overrides specified when the contact was reserved. For subsequent versions, these are the overrides associated with that specific version update.

Type: [TrackingOverrides](#) object

version

Version information for a contact.

Type: [ContactVersion](#) object

visibilityEndTime

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

Type: Timestamp

visibilityStartTime

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

Type: Timestamp

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeEphemeris

Retrieve information about an existing ephemeris.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

ephemerisId

The AWS Ground Station ephemeris ID.

Length Constraints: Fixed length of 36.

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",
  "errorReasons": [
    {
      "errorCode": "string",
      "errorMessage": "string"
    }
  ]
}
```

```
],
  "invalidReason": "string",
  "name": "string",
  "priority": number,
  "satelliteId": "string",
  "status": "string",
  "suppliedData": { ... },
  "tags": {
    "string" : "string"
  }
}
```

Response Elements

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

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

creationTime

The time the ephemeris was uploaded in UTC.

Type: Timestamp

enabled

Whether or not the ephemeris is enabled.

Type: Boolean

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

Length Constraints: Fixed length of 36.

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

errorReasons

Detailed error information for ephemerides with INVALID status.

Provides specific error codes and messages to help diagnose validation failures.

Type: Array of [EphemerisErrorReason](#) objects

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

[invalidReason](#)

Reason that an ephemeris failed validation. Appears only when the status is INVALID.

Type: String

Valid Values: METADATA_INVALID | TIME_RANGE_INVALID | TRAJECTORY_INVALID | KMS_KEY_INVALID | VALIDATION_ERROR

[name](#)

A name that you can use to identify the ephemeris.

Type: String

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

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

[priority](#)

A priority score that determines which ephemeris to use when multiple ephemerides overlap.

Higher numbers take precedence. The default is 1. Must be 1 or greater.

Type: Integer

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

[satelliteld](#)

The AWS Ground Station satellite ID associated with ephemeris.

Type: String

Length Constraints: Fixed length of 36.

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

[status](#)

The status of the ephemeris.

Type: String

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

suppliedData

Supplied ephemeris data.

Type: [EphemerisTypeDescription](#) object

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

tags

Tags assigned to an ephemeris.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetAgentConfiguration

Note

For use by AWS Ground Station Agent and shouldn't be called directly.

Gets the latest configuration information for a registered agent.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

agentId

UUID of agent to get configuration information for.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "agentId": "string",
  "taskingDocument": "string"
}
```

```
}
```

Response Elements

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

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

agentId

UUID of agent.

Type: String

Length Constraints: Fixed length of 36.

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

taskingDocument

Tasking document for agent.

Type: String

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetAgentTaskResponseUrl

Note

For use by AWS Ground Station Agent and shouldn't be called directly.

Gets a presigned URL for uploading agent task response logs.

Request Syntax

```
GET /agentResponseUrl/agentId/taskId HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

agentId

UUID of agent requesting the response URL.

Length Constraints: Fixed length of 36.

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

Required: Yes

taskId

GUID of the agent task for which the response URL is being requested.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "agentId": "string",
  "presignedLogUrl": "string",
  "taskId": "string"
}
```

Response Elements

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

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

agentId

UUID of the agent.

Type: String

Length Constraints: Fixed length of 36.

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

presignedLogUrl

Presigned URL for uploading agent task response logs.

Type: String

taskId

GUID of the agent task.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

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

GetConfig

Returns Config information.

Only one Config response can be returned.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a Config.

Length Constraints: Fixed length of 36.

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

Required: Yes

configType

Type of a Config.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
```

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

Response Elements

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

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

[configArn](#)

ARN of a Config

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

[configData](#)

Data elements in a Config.

Type: [ConfigTypeData](#) object

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

[configId](#)

UUID of a Config.

Type: String

configType

Type of a Config.

Type: String

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

name

Name of a Config.

Type: String

tags

Tags assigned to a Config.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetDataflowEndpointGroup

Returns the dataflow endpoint group.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json
```

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

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

```
        "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.

[contactPostPassDurationSeconds](#)

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

[contactPrePassDurationSeconds](#)

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

Type: Integer

Valid Range: Minimum value of 30. Maximum value of 480.

[dataflowEndpointGroupArn](#)

ARN of a dataflow endpoint group.

Type: String

Length Constraints: Minimum length of 97. Maximum length of 146.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:dataflow-endpoint-group/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

Length Constraints: Fixed length of 36.

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

endpointsDetails

Details of a dataflow endpoint.

Type: Array of [EndpointDetails](#) objects

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

tags

Tags assigned to a dataflow endpoint group.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetMinuteUsage

Returns the number of reserved minutes used by account.

Request Syntax

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

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

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

month

The month being requested, with a value of 1-12.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 12.

Required: Yes

year

The year being requested, in the format of YYYY.

Type: Integer

Valid Range: Minimum value of 2018. Maximum value of 3000.

Required: Yes

Response Syntax

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

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

Response Elements

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

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

estimatedMinutesRemaining

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

Type: Integer

isReservedMinutesCustomer

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

Type: Boolean

totalReservedMinuteAllocation

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

Type: Integer

totalScheduledMinutes

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

Type: Integer

upcomingMinutesScheduled

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

Type: Integer

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)

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

GetMissionProfile

Returns a mission profile.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

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

Response Elements

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

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

contactPostPassDurationSeconds

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

Type: Integer

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

contactPrePassDurationSeconds

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

Type: Integer

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

dataflowEdges

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

Type: Array of arrays of strings

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

Array Members: Fixed number of 2 items.

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]{0,4})/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

minimumViableContactDurationSeconds

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

Type: Integer

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

missionProfileArn

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

missionProfileId

UUID of a mission profile.

Type: String

Length Constraints: Fixed length of 36.

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

name

Name of a mission profile.

Type: String

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

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

region

Region of a mission profile.

Type: String

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

Pattern: `[\w-]+`

streamsKmsKey

KMS key to use for encrypting streams.

Type: [KmsKey](#) object

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

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: `arn:[a-z0-9- .]{1,63}:iam::[0-9]{12}:role/[\w+=, .@-]{1,64}`

tags

Tags assigned to a mission profile.

Type: String to string map

telemetrySinkConfigArn

ARN of a telemetry sink Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]{0,4}){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

trackingConfigArn

ARN of a tracking Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]{0,4})/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)

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

GetSatellite

Returns a satellite.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

satelliteId

UUID of a satellite.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

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

```
"satelliteArn": "string",  
"satelliteId": "string"  
}
```

Response Elements

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

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

currentEphemeris

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

Type: [EphemerisMetaData](#) object

groundStations

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

Type: Array of strings

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

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

noradSatelliteID

NORAD satellite ID number.

Type: Integer

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

satelliteArn

ARN of a satellite.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: arn:aws:groundstation:([a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

satelliteId

UUID of a satellite.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListAntennas

Returns a list of antennas at a specified ground station.

Request Syntax

```
GET /groundstation/groundStationId/antenna?maxResults=maxResults&nextToken=nextToken  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

groundStationId

ID of a ground station.

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

Required: Yes

maxResults

Maximum number of antennas returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

Next token returned in the request of a previous ListAntennas 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

{
  "antennaList": [
    {
      "antennaName": "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.

antennaList

List of antennas.

Type: Array of [AntennaListItem](#) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

nextToken

Next token to be used in a subsequent ListAntennas call to retrieve 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 Error Types](#).

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListConfigs

Returns a list of Config objects.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of Configs returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

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

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

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

Request Body

The request does not have a request body.

Response Syntax

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

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

```
    "configType": "string",  
    "name": "string"  
  }  
],  
"nextToken": "string"  
}
```

Response Elements

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

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

configList

List of Config items.

Type: Array of [ConfigListItem](#) objects

nextToken

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

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [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,
  "ephemeris": { ... },
  "groundStation": "string",
  "maxResults": number,
  "missionProfileArn": "string",
  "nextToken": "string",
  "satelliteArn": "string",
  "startTime": number,
  "statusList": [ "string" ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

endTime

End time of a contact in UTC.

Type: Timestamp

Required: Yes

ephemeris

Filter for selecting contacts that use a specific ephemeris".

Type: [EphemerisFilter](#) object

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

Required: No

[groundStation](#)

Name of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

Required: No

[maxResults](#)

Maximum number of contacts returned.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

[missionProfileArn](#)

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: arn:aws:groundstation:[a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: No

[nextToken](#)

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

Type: String

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

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

Required: No

satelliteArn

ARN of a satellite.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

startTime

Start time of a contact in UTC.

Type: Timestamp

Required: Yes

statusList

Status of a contact reservation.

Type: Array of strings

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

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

Required: Yes

Response Syntax

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

```
{
  "contactList": [
    {
      "contactId": "string",
      "contactStatus": "string",
      "endTime": number,
      "ephemeris": {
        "ephemerisId": "string",
        "ephemerisType": "string"
      },
      "errorMessage": "string",
      "groundStation": "string",
      "maximumElevation": {
        "unit": "string",
        "value": number
      },
      "missionProfileArn": "string",
      "postPassEndTime": number,
      "prePassStartTime": number,
      "region": "string",
      "satelliteArn": "string",
      "startTime": number,
      "tags": {
        "string" : "string"
      },
      "version": {
        "activated": number,
        "created": number,
        "failureCodes": [ "string" ],
        "failureMessage": "string",
        "lastUpdated": number,
        "status": "string",
        "superseded": number,
        "versionId": number
      },
      "visibilityEndTime": number,
      "visibilityStartTime": number
    }
  ],
  "nextToken": "string"
}
```

Response Elements

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

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

contactList

List of contacts.

Type: Array of [ContactData](#) objects

nextToken

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

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListContactVersions

Returns a list of versions for a specified contact.

Request Syntax

```
GET /contact/contactId/versions?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

Length Constraints: Fixed length of 36.

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

Required: Yes

maxResults

Maximum number of contact versions returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

Next token returned in the request of a previous `ListContactVersions` 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

{
  "contactVersionsList": [
    {
      "activated": number,
      "created": number,
      "failureCodes": [ "string" ],
      "failureMessage": "string",
      "lastUpdated": number,
      "status": "string",
      "superseded": number,
      "versionId": number
    }
  ],
  "nextToken": "string"
}
```

Response Elements

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

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

[contactVersionsList](#)

List of contact versions.

Type: Array of [ContactVersion](#) objects

[nextToken](#)

Next token to be used in a subsequent `ListContactVersions` call to retrieve 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 Error Types](#).

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)

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

ListDataflowEndpointGroups

Returns a list of DataflowEndpoint groups.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of dataflow endpoint groups returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

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

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

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

Request Body

The request does not have a request body.

Response Syntax

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

{
  "dataflowEndpointGroupList": [
    {
      "dataflowEndpointGroupArn": "string",
```

```
    "dataflowEndpointGroupId": "string"
  }
],
"nextToken": "string"
}
```

Response Elements

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

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

dataflowEndpointGroupList

A list of dataflow endpoint groups.

Type: Array of [DataflowEndpointListItem](#) objects

nextToken

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

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListEphemerides

List your existing ephemerides.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of ephemerides to return.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

Pagination token.

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

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

Request Body

The request accepts the following data in JSON format.

endTime

The end time for the list operation in UTC. Returns ephemerides with expiration times within your specified time range.

Type: Timestamp

Required: Yes

ephemerisType

Filter ephemerides by type. If not specified, all ephemeris types will be returned.

Type: String

Valid Values: TLE | OEM | AZ_EL | SERVICE_MANAGED

Required: No

satelliteld

The AWS Ground Station satellite ID to list ephemeris for.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

startTime

The start time for the list operation in UTC. Returns ephemerides with expiration times within your specified time range.

Type: Timestamp

Required: Yes

statusList

The list of ephemeris status to return.

Type: Array of strings

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

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

Required: No

Response Syntax

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

{
  "ephemerides": [
    {
      "creationTime": number,
      "enabled": boolean,
      "ephemerisId": "string",
      "ephemerisType": "string",
      "name": "string",
      "priority": number,
      "sourceS3Object": {
        "bucket": "string",
        "key": "string",
        "version": "string"
      },
      "status": "string"
    }
  ],
  "nextToken": "string"
}
```

Response Elements

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

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

ephemerides

List of ephemerides.

Type: Array of [EphemerisItem](#) objects

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

nextToken

Pagination token.

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

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

ListGroundStationReservations

Returns a list of reservations for a specified ground station.

Request Syntax

```
GET /groundstation/groundStationId/reservation?  
endTime=endTime&maxResults=maxResults&nextToken=nextToken&reservationTypes=reservationTypes&sta  
HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[endTime](#)

End time of the reservation window in UTC.

Required: Yes

[groundStationId](#)

ID of a ground station.

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

Required: Yes

[maxResults](#)

Maximum number of ground station reservations returned.

Valid Range: Minimum value of 1. Maximum value of 100.

[nextToken](#)

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

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

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

reservationTypes

Types of reservations to filter by.

Valid Values: MAINTENANCE | CONTACT

startTime

Start time of the reservation window in UTC.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "nextToken": "string",
  "reservationList": [
    {
      "antennaName": "string",
      "endTime": number,
      "groundStationId": "string",
      "reservationDetails": { ... },
      "reservationType": "string",
      "startTime": 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.

nextToken

Next token to be used in a subsequent `ListGroundStationReservations` call to retrieve the next page of results.

Type: String

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

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

reservationList

List of ground station reservations.

Type: Array of [GroundStationReservationListItem](#) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

See Also

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

- [AWS Command Line Interface V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListGroundStations

Returns a list of ground stations.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of ground stations returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

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

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

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

satelliteId

Satellite ID to retrieve on-boarded ground stations.

Length Constraints: Fixed length of 36.

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

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "groundStationList": [
    {
      "groundStationId": "string",
      "groundStationName": "string",
      "region": "string"
    }
  ],
  "nextToken": "string"
}
```

Response Elements

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

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

groundStationList

List of ground stations.

Type: Array of [GroundStationData](#) objects

nextToken

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

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListMissionProfiles

Returns a list of mission profiles.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

maxResults

Maximum number of mission profiles returned.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

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

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

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

Request Body

The request does not have a request body.

Response Syntax

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

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

```
    "name": "string",  
    "region": "string"  
  }  
],  
"nextToken": "string"  
}
```

Response Elements

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

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

missionProfileList

List of mission profiles.

Type: Array of [MissionProfileListItem](#) objects

nextToken

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

Type: String

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

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListSatellites

Returns a list of satellites.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

[maxResults](#)

Maximum number of satellites returned.

Valid Range: Minimum value of 1. Maximum value of 100.

[nextToken](#)

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

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

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

Request Body

The request does not have a request body.

Response Syntax

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

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

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

Response Elements

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

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

nextToken

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

Type: String

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

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

satellites

List of satellites.

Type: Array of [SatelliteListItem](#) objects

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListTagsForResource

Returns a list of tags for a specified resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

ARN of a resource.

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

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

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "tags": {
    "string" : "string"
  }
}
```

Response Elements

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

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

tags

Tags assigned to a resource.

Type: String to string map

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)

- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RegisterAgent

Note

For use by AWS Ground Station Agent and shouldn't be called directly.

Registers a new agent with AWS Ground Station.

Request Syntax

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

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

agentDetails

Detailed information about the agent being registered.

Type: [AgentDetails](#) object

Required: Yes

discoveryData

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

Type: [DiscoveryData](#) object

Required: Yes

tags

Tags assigned to an Agent.

Type: String to string map

Required: No

Response Syntax

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

```
{
  "agentId": "string"
}
```

Response Elements

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

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

agentId

UUID of registered agent.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [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"
  },
  "trackingOverrides": {
    "programTrackSettings": { ... }
  }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

endTime

End time of a contact in UTC.

Type: Timestamp

Required: Yes

groundStation

Name of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

Required: Yes

missionProfileArn

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: Yes

satelliteArn

ARN of a satellite

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: No

startTime

Start time of a contact in UTC.

Type: Timestamp

Required: Yes

tags

Tags assigned to a contact.

Type: String to string map

Required: No

trackingOverrides

Tracking configuration overrides for the contact.

Type: TrackingOverrides object

Required: No

Response Syntax

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

{
  "contactId": "string",
  "versionId": number
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

versionId

Version ID of a contact.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 128.

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

ResourceLimitExceededException

Account limits for this resource have been exceeded.

parameterName

Name of the parameter that exceeded the resource limit.

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 V2](#)

- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TagResource

Assigns a tag to a resource.

Request Syntax

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

```
{  
  "tags": {  
    "string" : "string"  
  }  
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

ARN of a resource tag.

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

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

Tags assigned to a resource.

Type: String to string map

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UntagResource

Deassigns a resource tag.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

ARN of a resource.

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

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

Required: Yes

tagKeys

Keys of a resource tag.

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

Length Constraints: Minimum length of 1.

Pattern: [\s\S]+

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

Response Elements

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

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

UpdateAgentStatus

Note

For use by AWS Ground Station Agent and shouldn't be called directly.

Update the status of the agent.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

agentId

UUID of agent to update.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

aggregateStatus

Aggregate status for agent.

Type: [AggregateStatus](#) object

Required: Yes

componentStatuses

List of component statuses for agent.

Type: Array of [ComponentStatusData](#) objects

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

Required: Yes

taskId

GUID of agent task.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "agentId": "string"
}
```

Response Elements

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

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

agentId

UUID of updated agent.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateConfig

Updates the Config used when scheduling contacts.

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

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

configId

UUID of a Config.

Length Constraints: Fixed length of 36.

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

Required: Yes

configType

Type of a Config.

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

configData

Parameters of a Config.

Type: [ConfigTypeData](#) object

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

Required: Yes

name

Name of a Config.

Type: String

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

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

Required: Yes

Response Syntax

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

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

Response Elements

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

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

configArn

ARN of a Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

configId

UUID of a Config.

Type: String

configType

Type of a Config.

Type: String

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateContact

Updates a specific contact.

Request Syntax

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

```
{
  "clientToken": "string",
  "satelliteArn": "string",
  "trackingOverrides": {
    "programTrackSettings": { ... }
  }
}
```

URI Request Parameters

The request uses the following URI parameters.

contactId

UUID of a contact.

Length Constraints: Fixed length of 36.

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.

clientToken

A client token is a unique, case-sensitive string of up to 64 ASCII characters. It is generated by the client to ensure idempotent operations, allowing safe retries without unintended side effects.

Type: String

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

Pattern: `[!-~]{1,64}`

Required: No

satelliteArn

ARN of a satellite.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

trackingOverrides

Overrides the default tracking configuration on an antenna during a contact.

Type: [TrackingOverrides](#) object

Required: No

Response Syntax

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

{
  "contactId": "string",
  "versionId": number
}
```

Response Elements

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

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

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

versionId

Version ID of a contact.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 128.

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

HTTP Status Code: 431

ResourceLimitExceededException

Account limits for this resource have been exceeded.

parameterName

Name of the parameter that exceeded the resource limit.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateEphemeris

Update an existing ephemeris.

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

ephemerisId

The AWS Ground Station ephemeris ID.

Length Constraints: Fixed length of 36.

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

Enable or disable the ephemeris. Changing this value doesn't require re-validation.

Type: Boolean

Required: Yes

name

A name that you can use to identify the ephemeris.

Type: String

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

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

Required: No

priority

A priority score that determines which ephemeris to use when multiple ephemerides overlap.

Higher numbers take precedence. The default is 1. Must be 1 or greater.

Type: Integer

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

Required: No

Response Syntax

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

{
  "ephemerisId": "string"
}
```

Response Elements

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

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

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)

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

UpdateMissionProfile

Updates a mission profile.

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

Request Syntax

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

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

URI Request Parameters

The request uses the following URI parameters.

missionProfileId

UUID of a mission profile.

Length Constraints: Fixed length of 36.

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

Required: Yes

Request Body

The request accepts the following data in JSON format.

contactPostPassDurationSeconds

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

Type: Integer

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

Required: No

contactPrePassDurationSeconds

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

Type: Integer

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

Required: No

dataflowEdges

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

Type: Array of arrays of strings

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

Array Members: Fixed number of 2 items.

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: No

minimumViableContactDurationSeconds

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

Type: Integer

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

Required: No

name

Name of a mission profile.

Type: String

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

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

Required: No

streamsKmsKey

KMS key to use for encrypting streams.

Type: [KmsKey](#) object

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

Required: No

streamsKmsRole

Role to use for encrypting streams with KMS key.

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: arn:[a-z0-9-]{1,63}:iam::[0-9]{12}:role/[\w+=,.\@-]{1,64}

Required: No

telemetrySinkConfigArn

ARN of a telemetry sink Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: No

[trackingConfigArn](#)

ARN of a tracking Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: No

Response Syntax

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

{
  "missionProfileId": "string"
}
```

Response Elements

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

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

[missionProfileId](#)

UUID of a mission profile.

Type: String

Length Constraints: Fixed length of 36.

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

Errors

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

DependencyException

Dependency encountered an error.

parameterName

Name of the parameter that caused the exception.

HTTP Status Code: 531

InvalidParameterException

One or more parameters are not valid.

parameterName

Name of the invalid parameter.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

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

Data Types

The AWS Ground Station API contains several data types that various actions use. This section describes each data type in detail.

Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AgentDetails](#)
- [AggregateStatus](#)
- [AntennaDemodDecodeDetails](#)
- [AntennaDownlinkConfig](#)
- [AntennaDownlinkDemodDecodeConfig](#)
- [AntennaListItem](#)
- [AntennaUplinkConfig](#)
- [AwsGroundStationAgentEndpoint](#)
- [AzElEphemeris](#)
- [AzElEphemerisFilter](#)
- [AzElProgramTrackSettings](#)
- [AzElSegment](#)
- [AzElSegments](#)
- [AzElSegmentsData](#)
- [ComponentStatusData](#)
- [ComponentVersion](#)
- [ConfigDetails](#)
- [ConfigListItem](#)
- [ConfigTypeData](#)
- [ConnectionDetails](#)

- [ContactData](#)
- [ContactReservationDetails](#)
- [ContactVersion](#)
- [CreateEndpointDetails](#)
- [DataflowDetail](#)
- [DataflowEndpoint](#)
- [DataflowEndpointConfig](#)
- [DataflowEndpointListItem](#)
- [DecodeConfig](#)
- [DemodulationConfig](#)
- [Destination](#)
- [DiscoveryData](#)
- [DownlinkAwsGroundStationAgentEndpoint](#)
- [DownlinkAwsGroundStationAgentEndpointDetails](#)
- [DownlinkConnectionDetails](#)
- [DownlinkDataflowDetails](#)
- [Eirp](#)
- [Elevation](#)
- [EndpointDetails](#)
- [EphemerisData](#)
- [EphemerisDescription](#)
- [EphemerisErrorReason](#)
- [EphemerisFilter](#)
- [EphemerisItem](#)
- [EphemerisMetaData](#)
- [EphemerisResponseData](#)
- [EphemerisTypeDescription](#)
- [Frequency](#)
- [FrequencyBandwidth](#)
- [GroundStationData](#)

- [GroundStationReservationListItem](#)
- [IntegerRange](#)
- [ISO8601TimeRange](#)
- [KinesisDataStreamData](#)
- [KmsKey](#)
- [MaintenanceReservationDetails](#)
- [MissionProfileListItem](#)
- [OEMEphemeris](#)
- [OemProgramTrackSettings](#)
- [ProgramTrackSettings](#)
- [RangedConnectionDetails](#)
- [RangedSocketAddress](#)
- [ReservationDetails](#)
- [S3Object](#)
- [S3RecordingConfig](#)
- [S3RecordingDetails](#)
- [SatelliteListItem](#)
- [SecurityDetails](#)
- [SocketAddress](#)
- [Source](#)
- [SpectrumConfig](#)
- [TelemetrySinkConfig](#)
- [TelemetrySinkData](#)
- [TimeAzEl](#)
- [TimeRange](#)
- [TLEData](#)
- [TLEEphemeris](#)
- [TleProgramTrackSettings](#)
- [TrackingConfig](#)
- [TrackingOverrides](#)

- [UplinkAwsGroundStationAgentEndpoint](#)
- [UplinkAwsGroundStationAgentEndpointDetails](#)
- [UplinkConnectionDetails](#)
- [UplinkDataflowDetails](#)
- [UplinkEchoConfig](#)
- [UplinkSpectrumConfig](#)

AgentDetails

Detailed information about the agent.

Contents

agentVersion

Current agent version.

Type: String

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

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

Required: Yes

componentVersions

List of versions being used by agent components.

Type: Array of [ComponentVersion](#) objects

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

Required: Yes

instanceId

ID of EC2 instance agent is running on.

Type: String

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

Pattern: $[a-z\emptyset-9-]\{10,64\}$

Required: Yes

instanceType

Type of EC2 instance agent is running on.

Type: String

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

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

Required: Yes

agentCpuCores

List of CPU cores reserved for the agent.

Type: Array of integers

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

Required: No

reservedCpuCores

 **Note**

This field should not be used. Use `agentCpuCores` instead.

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

Type: Array of integers

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

Required: No

See Also

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

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

AggregateStatus

Aggregate status of Agent components.

Contents

status

Aggregate status.

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: Yes

signatureMap

Sparse map of failure signatures.

Type: String to boolean map

Required: No

See Also

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

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

AntennaDemodDecodeDetails

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

Contents

outputNode

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

Type: String

Required: No

See Also

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

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

AntennaDownlinkConfig

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

Contents

spectrumConfig

Object that describes a spectral Config.

Type: [SpectrumConfig](#) object

Required: Yes

See Also

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

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

AntennaDownlinkDemodDecodeConfig

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

Contents

decodeConfig

Information about the decode Config.

Type: [DecodeConfig](#) object

Required: Yes

demodulationConfig

Information about the demodulation Config.

Type: [DemodulationConfig](#) object

Required: Yes

spectrumConfig

Information about the spectral Config.

Type: [SpectrumConfig](#) object

Required: Yes

See Also

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

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

AntennaListItem

An antenna at a ground station.

Contents

antennaName

Name of the antenna.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 256.

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

Required: Yes

groundStationName

Name of the ground station the antenna is associated with.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:={4,97}

Required: Yes

region

Region of the antenna.

Type: String

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

Pattern: [\w-]+

Required: Yes

See Also

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

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

AntennaUplinkConfig

Information about the uplink Config of an antenna.

Contents

spectrumConfig

Information about the uplink spectral Config.

Type: [UplinkSpectrumConfig](#) object

Required: Yes

targetEirp

EIRP of the target.

Type: [Eirp](#) object

Required: Yes

transmitDisabled

Whether or not uplink transmit is disabled.

Type: Boolean

Required: No

See Also

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

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

AwsGroundStationAgentEndpoint

Information about AwsGroundStationAgentEndpoint.

Contents

egressAddress

The egress address of AgentEndpoint.

Type: [ConnectionDetails](#) object

Required: Yes

ingressAddress

The ingress address of AgentEndpoint.

Type: [RangedConnectionDetails](#) object

Required: Yes

name

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

Type: String

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

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

Required: Yes

agentStatus

The status of AgentEndpoint.

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: No

auditResults

The results of the audit.

Type: String

Valid Values: HEALTHY | UNHEALTHY

Required: No

See Also

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

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

AzElEphemeris

Azimuth elevation ephemeris data.

Use this ephemeris type to provide pointing angles directly, rather than satellite orbital elements. Use this when you need precise antenna pointing but have imprecise or unknown satellite trajectory information.

The azimuth elevation data specifies the antenna pointing direction at specific times relative to a ground station location. AWS Ground Station uses 4th order Lagrange interpolation to compute pointing angles between the provided data points.

AWS Ground Station automatically filters interpolated pointing angles, including only those that are above the site mask elevation of the specified ground station.

For more detail about providing azimuth elevation ephemerides to AWS Ground Station, see the [azimuth elevation ephemeris section](#) of the AWS Ground Station User Guide.

Contents

data

Azimuth elevation segment data.

You can provide data inline in the request or through an Amazon S3 object reference.

Type: [AzElSegmentsData](#) object

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

Required: Yes

groundStation

The ground station name for which you're providing azimuth elevation data.

This ephemeris is specific to this ground station and can't be used at other locations.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:={4,97}

Required: Yes

See Also

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

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

AzElEphemerisFilter

Filter for selecting contacts that use a specific [AzElEphemeris](#).

Contents

id

Unique identifier of the azimuth elevation ephemeris.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

See Also

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

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

AzElProgramTrackSettings

Program track settings for [AzElEphemeris](#).

Contents

ephemerisId

Unique identifier of the azimuth elevation ephemeris.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

See Also

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

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

AzElSegment

A time segment containing azimuth elevation pointing data.

Each segment defines a continuous time period with pointing angle data points. AWS Ground Station uses 4th order Lagrange interpolation between the provided points, so each segment must contain at least five data points.

Contents

azElList

List of time-tagged azimuth elevation data points.

Must contain at least five points to support 4th order Lagrange interpolation. Points must be in chronological order with no duplicates.

Type: Array of [TimeAzEl](#) objects

Array Members: Minimum number of 5 items.

Required: Yes

referenceEpoch

The reference time for this segment in ISO 8601 format in Coordinated Universal Time (UTC).

All time values within the segment's [AzElSegment:azElList](#) are specified as offsets in atomic seconds from this reference epoch.

Example: `2024-01-15T12:00:00.000Z`

Type: Timestamp

Required: Yes

validTimeRange

The valid time range for this segment.

Specifies the start and end timestamps in ISO 8601 format in Coordinated Universal Time (UTC). The segment's pointing data must cover this entire time range.

Type: [ISO8601TimeRange](#) object

Required: Yes

See Also

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

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

AzElSegments

Azimuth elevation segment collection.

Contains five or more time-ordered segments that define antenna pointing angles over the ephemeris validity period.

Contents

angleUnit

The unit of measure for azimuth and elevation angles. All angles in all segments must use the same unit.

Type: String

Valid Values: DEGREE_ANGLE | RADIAN

Required: Yes

azElSegmentList

List of azimuth elevation segments.

Must contain between 1 and 100 segments. Segments must be in chronological order with no overlaps.

Type: Array of [AzElSegment](#) objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

Required: Yes

See Also

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

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

AzElSegmentsData

Container for azimuth elevation segment data.

Specify either [AzElSegmentsData:s3Object](#) to reference data in Amazon S3, or [AzElSegmentsData:azElData](#) to provide data inline.

Contents

Important

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

azElData

Azimuth elevation segment data provided directly in the request.

Use this option for smaller datasets or when Amazon S3 access is not available.

Type: [AzElSegments](#) object

Required: No

s3Object

The Amazon S3 object containing azimuth elevation segment data.

The Amazon S3 object must contain JSON-formatted azimuth elevation data matching the [AzElSegments](#) structure.

Type: [S3Object](#) object

Required: No

See Also

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

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

ComponentStatusData

Data on the status of agent components.

Contents

capabilityArn

Capability ARN of the component.

Type: String

Required: Yes

componentType

The Component type.

Type: String

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

Required: Yes

dataflowId

Dataflow UUID associated with the component.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

status

Component status.

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: Yes

bytesReceived

Bytes received by the component.

Type: Long

Required: No

bytesSent

Bytes sent by the component.

Type: Long

Required: No

packetsDropped

Packets dropped by component.

Type: Long

Required: No

See Also

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

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

ComponentVersion

Version information for agent components.

Contents

componentType

Component type.

Type: String

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

Required: Yes

versions

List of versions.

Type: Array of strings

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

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

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

Required: Yes

See Also

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

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

ConfigDetails

Details for certain Config object types in a contact.

Contents

Important

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

antennaDemodDecodeDetails

Details for antenna demod decode Config in a contact.

Type: [AntennaDemodDecodeDetails](#) object

Required: No

endpointDetails

Information about the endpoint details.

Type: [EndpointDetails](#) object

Required: No

s3RecordingDetails

Details for an S3 recording Config in a contact.

Type: [S3RecordingDetails](#) object

Required: No

See Also

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

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

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

ConfigListItem

An item in a list of Config objects.

Contents

configArn

ARN of a Config.

Type: String

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

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 | tracking | dataflow-endpoint | antenna-uplink | uplink-echo | s3-recording | telemetry-sink`

Required: No

name

Name of a Config.

Type: String

Required: No

See Also

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

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

ConfigTypeData

Object containing the parameters of a Config.

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

Contents

Important

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

antennaDownlinkConfig

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

Type: [AntennaDownlinkConfig](#) object

Required: No

antennaDownlinkDemodDecodeConfig

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

Type: [AntennaDownlinkDemodDecodeConfig](#) object

Required: No

antennaUplinkConfig

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

Type: [AntennaUplinkConfig](#) object

Required: No

dataflowEndpointConfig

Information about the dataflow endpoint Config.

Type: [DataflowEndpointConfig](#) object

Required: No

s3RecordingConfig

Information about an S3 recording Config.

Type: [S3RecordingConfig](#) object

Required: No

telemetrySinkConfig

Information about a telemetry sink Config.

Type: [TelemetrySinkConfig](#) object

Required: No

trackingConfig

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

Type: [TrackingConfig](#) object

Required: No

uplinkEchoConfig

Information about an uplink echo Config.

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

Type: [UplinkEchoConfig](#) object

Required: No

See Also

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

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

ConnectionDetails

Egress address of AgentEndpoint with an optional mtu.

Contents

socketAddress

A socket address.

Type: [SocketAddress](#) object

Required: Yes

mtu

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

Type: Integer

Required: No

See Also

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

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

ContactData

Data describing a contact.

Contents

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

endTime

End time of a contact in UTC.

Type: Timestamp

Required: No

ephemeris

The ephemeris that determines antenna pointing for the contact.

Type: [EphemerisResponseData](#) object

Required: No

errorMessage

Error message of a contact.

Type: String

Required: No

groundStation

Name of a ground station.

Type: String

Required: No

maximumElevation

Maximum elevation angle of a contact.

Type: [Elevation](#) object

Required: No

missionProfileArn

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

postPassEndTime

End time in UTC of the post-pass period, at which you receive a CloudWatch event indicating the pass has finished.

Type: Timestamp

Required: No

prePassStartTime

Start time in UTC of the pre-pass period, at which you 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

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[-a-f0-9]{8}-[-a-f0-9]{4}-[-a-f0-9]{4}-[-a-f0-9]{4}-[-a-f0-9]{12}`

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

version

Version information for a contact.

Type: [ContactVersion](#) object

Required: No

visibilityEndTime

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

Type: Timestamp

Required: No

visibilityStartTime

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

Type: Timestamp

Required: No

See Also

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

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

ContactReservationDetails

Details of a contact reservation.

Contents

contactId

UUID of a contact.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

See Also

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

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

ContactVersion

Version information for a contact.

Contents

activated

Time the contact version was activated in UTC. A version is activated when it becomes the current active version of the contact.

Type: Timestamp

Required: No

created

Time the contact version was created in UTC.

Type: Timestamp

Required: No

failureCodes

List of failure codes for the contact version.

Type: Array of strings

Valid Values: INTERNAL_ERROR | INVALID_SATELLITE_ARN | INVALID_UPDATE_CONTACT_REQUEST | EPHEMERIS_NOT_FOUND | EPHEMERIS_TIME_RANGE_INVALID | EPHEMERIS_NOT_ENABLED | SATELLITE_DOES_NOT_MATCH_EPHEMERIS | NOT_ONBOARDED_TO_AZEL_EPHEMERIS | AZEL_EPHEMERIS_NOT_FOUND | AZEL_EPHEMERIS_WRONG_GROUND_STATION | AZEL_EPHEMERIS_INVALID_STATUS | AZEL_EPHEMERIS_TIME_RANGE_INVALID

Required: No

failureMessage

Failure message for the contact version.

Type: String

Required: No

lastUpdated

Time the contact version was last updated in UTC.

Type: Timestamp

Required: No

status

Status of the contact version.

Type: String

Valid Values: UPDATING | ACTIVE | SUPERSEDED | FAILED_TO_UPDATE

Required: No

superseded

Time the contact version was superseded in UTC. A version is superseded when a newer version becomes active.

Type: Timestamp

Required: No

versionId

Version ID of a contact.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 128.

Required: No

See Also

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

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

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

CreateEndpointDetails

Endpoint definition used for creating a dataflow endpoint

Contents

Important

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

downlinkAwsGroundStationAgentEndpoint

Definition for a downlink agent endpoint

Type: [DownlinkAwsGroundStationAgentEndpoint](#) object

Required: No

uplinkAwsGroundStationAgentEndpoint

Definition for an uplink agent endpoint

Type: [UplinkAwsGroundStationAgentEndpoint](#) object

Required: No

See Also

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

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

DataflowDetail

Information about a dataflow edge used in a contact.

Contents

destination

Dataflow details for the destination side.

Type: [Destination](#) object

Required: No

errorMessage

Error message for a dataflow.

Type: String

Required: No

source

Dataflow details for the source side.

Type: [Source](#) object

Required: No

See Also

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

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

DataflowEndpoint

Information about a dataflow endpoint.

Contents

address

Socket address of a dataflow endpoint.

Type: [SocketAddress](#) object

Required: No

mtu

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

Type: Integer

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

Required: No

name

Name of a dataflow endpoint.

Type: String

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

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

Required: No

status

Status of a dataflow endpoint.

Type: String

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

Required: No

See Also

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

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

DataflowEndpointConfig

Information about the dataflow endpoint Config.

Contents

dataflowEndpointName

Name of a dataflow endpoint.

Type: String

Required: Yes

dataflowEndpointRegion

Region of a dataflow endpoint.

Type: String

Required: No

See Also

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

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

DataflowEndpointListItem

Item in a list of DataflowEndpoint groups.

Contents

dataflowEndpointGroupArn

ARN of a dataflow endpoint group.

Type: String

Length Constraints: Minimum length of 97. Maximum length of 146.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:dataflow-endpoint-group/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

dataflowEndpointGroupId

UUID of a dataflow endpoint group.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

See Also

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

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

DecodeConfig

Information about the decode Config.

Contents

unvalidatedJSON

Unvalidated JSON of a decode Config.

Type: String

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

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

Required: Yes

See Also

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

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

DemodulationConfig

Information about the demodulation Config.

Contents

unvalidatedJSON

Unvalidated JSON of a demodulation Config.

Type: String

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

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

Required: Yes

See Also

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

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

Destination

Dataflow details for the destination side.

Contents

configDetails

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

Type: [ConfigDetails](#) object

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

Required: No

configId

UUID of a `Config`.

Type: String

Length Constraints: Fixed length of 36.

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` | `tracking` | `dataflow-endpoint` | `antenna-uplink` | `uplink-echo` | `s3-recording` | `telemetry-sink`

Required: No

dataflowDestinationRegion

Region of a dataflow destination.

Type: String

Required: No

See Also

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

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

DiscoveryData

Data for agent discovery.

Contents

capabilityArns

List of capabilities to associate with agent.

Type: Array of strings

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

Required: Yes

privateIpAddresses

List of private IP addresses to associate with agent.

Type: Array of strings

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

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

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

Required: Yes

publicIpAddresses

List of public IP addresses to associate with agent.

Type: Array of strings

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

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

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

Required: Yes

See Also

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

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

DownlinkAwsGroundStationAgentEndpoint

Definition for a downlink agent endpoint

Contents

dataflowDetails

Dataflow details for the downlink endpoint

Type: [DownlinkDataflowDetails](#) object

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

Required: Yes

name

Downlink dataflow endpoint name

Type: String

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

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

Required: Yes

See Also

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

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

DownlinkAwsGroundStationAgentEndpointDetails

Details for a downlink agent endpoint

Contents

dataflowDetails

Dataflow details for the downlink endpoint

Type: [DownlinkDataflowDetails](#) object

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

Required: Yes

name

Downlink dataflow endpoint name

Type: String

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

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

Required: Yes

agentStatus

Status of the agent associated with the downlink dataflow endpoint

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: No

auditResults

Health audit results for the downlink dataflow endpoint

Type: String

Valid Values: HEALTHY | UNHEALTHY

Required: No

See Also

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

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

DownlinkConnectionDetails

Connection details for Ground Station to Agent and Agent to customer

Contents

agentIpAndPortAddress

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

Type: [RangedConnectionDetails](#) object

Required: Yes

egressAddressAndPort

Egress address of AgentEndpoint with an optional mtu.

Type: [ConnectionDetails](#) object

Required: Yes

See Also

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

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

DownlinkDataflowDetails

Dataflow details for a downlink endpoint

Contents

Important

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

agentConnectionDetails

Downlink connection details for customer to Agent and Agent to Ground Station

Type: [DownlinkConnectionDetails](#) object

Required: No

See Also

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

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

Eirp

Object that represents EIRP.

Contents

units

Units of an EIRP.

Type: String

Valid Values: dBW

Required: Yes

value

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

Type: Double

Required: Yes

See Also

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

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

Elevation

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

Contents

unit

Elevation angle units.

Type: String

Valid Values: DEGREE_ANGLE | RADIAN

Required: Yes

value

Elevation angle value.

Type: Double

Required: Yes

See Also

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

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

EndpointDetails

Information about the endpoint details.

Contents

awsGroundStationAgentEndpoint

An agent endpoint.

Type: [AwsGroundStationAgentEndpoint](#) object

Required: No

downlinkAwsGroundStationAgentEndpoint

Definition for a downlink agent endpoint

Type: [DownlinkAwsGroundStationAgentEndpointDetails](#) object

Required: No

endpoint

A dataflow endpoint.

Type: [DataflowEndpoint](#) object

Required: No

healthReasons

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

Type: Array of strings

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

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

Required: No

healthStatus

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

Type: String

Valid Values: HEALTHY | UNHEALTHY

Required: No

securityDetails

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

Type: [SecurityDetails](#) object

Required: No

uplinkAwsGroundStationAgentEndpoint

Definition for an uplink agent endpoint

Type: [UplinkAwsGroundStationAgentEndpointDetails](#) object

Required: No

See Also

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

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

EphemerisData

Ephemeris data.

Contents

Important

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

azEl

Azimuth elevation ephemeris data.

Use this ephemeris type to provide pointing angles directly, rather than satellite orbital elements. Use this when you need precise antenna pointing but have imprecise or unknown satellite trajectory information.

The azimuth elevation data specifies the antenna pointing direction at specific times relative to a ground station location. AWS Ground Station uses 4th order Lagrange interpolation to compute pointing angles between the provided data points.

AWS Ground Station automatically filters interpolated pointing angles, including only those that are above the site mask elevation of the specified ground station.

For more detail about providing azimuth elevation ephemerides to AWS Ground Station, see the [azimuth elevation ephemeris section](#) of the AWS Ground Station User Guide.

Type: [AzElEphemeris](#) object

Required: No

oem

Ephemeris data in Orbit Ephemeris Message (OEM) format.

AWS Ground Station processes OEM ephemerides according to the [CCSDS standard](#) with some extra restrictions. OEM files should be in KVN format. For more detail about the OEM format

that AWS Ground Station supports, see [OEM ephemeris format](#) in the AWS Ground Station user guide.

Type: [OEMEphemeris](#) object

Required: No

tle

Two-line element set (TLE) ephemeris.

For more detail about providing Two-line element sets to AWS Ground Station, see the [TLE section](#) of the AWS Ground Station user guide.

Type: [TLEEphemeris](#) object

Required: No

See Also

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

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

EphemerisDescription

Description of ephemeris.

Contents

ephemerisData

Supplied ephemeris data.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[\s\S]+`

Required: No

sourceS3Object

Source Amazon S3 object used for the ephemeris.

Type: [S3Object](#) object

Required: No

See Also

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

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

EphemerisErrorReason

Detailed error information for ephemeris validation failures.

Provides an error code and descriptive message to help diagnose and resolve validation issues.

Contents

errorCode

The error code identifying the type of validation failure.

See the [Troubleshooting Invalid Ephemerides guide](#) for error code details.

Type: String

Valid Values: INTERNAL_ERROR | MISMATCHED_SATCAT_ID
| OEM_VERSION_UNSUPPORTED | ORIGINATOR_MISSING |
CREATION_DATE_MISSING | OBJECT_NAME_MISSING | OBJECT_ID_MISSING
| REF_FRAME_UNSUPPORTED | REF_FRAME_EPOCH_UNSUPPORTED
| TIME_SYSTEM_UNSUPPORTED | CENTER_BODY_UNSUPPORTED |
INTERPOLATION_MISSING | INTERPOLATION_DEGREE_INVALID |
AZ_EL_SEGMENT_LIST_MISSING | INSUFFICIENT_TIME_AZ_EL |
START_TIME_IN_FUTURE | END_TIME_IN_PAST | EXPIRATION_TIME_TOO_EARLY
| START_TIME_METADATA_TOO_EARLY | STOP_TIME_METADATA_TOO_LATE |
AZ_EL_SEGMENT_END_TIME_BEFORE_START_TIME | AZ_EL_SEGMENT_TIMES_OVERLAP
| AZ_EL_SEGMENTS_OUT_OF_ORDER | TIME_AZ_EL_ITEMS_OUT_OF_ORDER
| MEAN_MOTION_INVALID | TIME_AZ_EL_AZ_RADIAN_RANGE_INVALID |
TIME_AZ_EL_EL_RADIAN_RANGE_INVALID | TIME_AZ_EL_AZ_DEGREE_RANGE_INVALID
| TIME_AZ_EL_EL_DEGREE_RANGE_INVALID | TIME_AZ_EL_ANGLE_UNITS_INVALID
| INSUFFICIENT_KMS_PERMISSIONS | FILE_FORMAT_INVALID |
AZ_EL_SEGMENT_REFERENCE_EPOCH_INVALID | AZ_EL_SEGMENT_START_TIME_INVALID
| AZ_EL_SEGMENT_END_TIME_INVALID |
AZ_EL_SEGMENT_VALID_TIME_RANGE_INVALID | AZ_EL_SEGMENT_END_TIME_TOO_LATE
| AZ_EL_TOTAL_DURATION_EXCEEDED

Required: Yes

errorMessage

A human-readable message describing the validation failure.

Provides specific details about what failed and may include suggestions for remediation.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1000.

Required: Yes

See Also

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

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

EphemerisFilter

Filter for selecting contacts that use a specific ephemeris".

Contents

Important

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

azEl

Filter for [AzElEphemeris](#).

Type: [AzElEphemerisFilter](#) object

Required: No

See Also

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

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

EphemerisItem

Ephemeris item.

Contents

creationTime

The time the ephemeris was uploaded in UTC.

Type: Timestamp

Required: No

enabled

Whether or not the ephemeris is enabled.

Type: Boolean

Required: No

ephemerisId

The AWS Ground Station ephemeris ID.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

ephemerisType

The type of ephemeris.

Type: String

Valid Values: TLE | OEM | AZ_EL | SERVICE_MANAGED

Required: No

name

A name that you can use to identify the ephemeris.

Type: String

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

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

Required: No

priority

A priority score that determines which ephemeris to use when multiple ephemerides overlap.

Higher numbers take precedence. The default is 1. Must be 1 or greater.

Type: Integer

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

Required: No

sourceS3Object

Source Amazon S3 object used for the ephemeris.

Type: [S3Object](#) object

Required: No

status

The status of the ephemeris.

Type: String

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

Required: No

See Also

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

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

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

EphemerisMetadata

Metadata describing a particular ephemeris.

Contents

source

The `EphemerisSource` that generated a given ephemeris.

Type: String

Valid Values: CUSTOMER_PROVIDED | SPACE_TRACK

Required: Yes

ephemerisId

UUID of a customer-provided ephemeris.

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

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

epoch

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

This field is not populated for customer-provided ephemerides.

Type: Timestamp

Required: No

name

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

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

Type: String

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

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

Required: No

See Also

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

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

EphemerisResponseData

Ephemeris data for a contact.

Contents

ephemerisType

Type of ephemeris.

Type: String

Valid Values: TLE | OEM | AZ_EL | SERVICE_MANAGED

Required: Yes

ephemerisId

Unique identifier of the ephemeris. Appears only for custom ephemerides.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

See Also

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

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

EphemerisTypeDescription

Contents

Important

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

azEl

Description of ephemeris.

Type: [EphemerisDescription](#) object

Required: No

oem

Description of ephemeris.

Type: [EphemerisDescription](#) object

Required: No

tle

Description of ephemeris.

Type: [EphemerisDescription](#) object

Required: No

See Also

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

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

- [AWS SDK for Ruby V3](#)

Frequency

Object that describes the frequency.

Contents

units

Frequency units.

Type: String

Valid Values: GHz | MHz | kHz

Required: Yes

value

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

Type: Double

Required: Yes

See Also

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

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

FrequencyBandwidth

Object that describes the frequency bandwidth.

Contents

units

Frequency bandwidth units.

Type: String

Valid Values: GHz | MHz | kHz

Required: Yes

value

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

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

Type: Double

Required: Yes

See Also

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

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

GroundStationData

Information about the ground station data.

Contents

groundStationId

ID of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:={4,97}

Required: No

groundStationName

Name of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:={4,97}

Required: No

region

Ground station Region.

Type: String

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

Pattern: [\w-]+

Required: No

See Also

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

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

GroundStationReservationListItem

Item in a list of ground station reservations.

Contents

antennaName

Name of an antenna.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 256.

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

Required: Yes

endTime

End time of a ground station reservation in UTC.

Type: Timestamp

Required: Yes

groundStationId

ID of a ground station.

Type: String

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

Required: Yes

reservationDetails

Details of a ground station reservation.

Type: [ReservationDetails](#) object

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

Required: Yes

reservationType

Type of a ground station reservation.

Type: String

Valid Values: MAINTENANCE | CONTACT

Required: Yes

startTime

Start time of a ground station reservation in UTC.

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

IntegerRange

An integer range that has a minimum and maximum value.

Contents

maximum

A maximum value.

Type: Integer

Required: Yes

minimum

A minimum value.

Type: Integer

Required: Yes

See Also

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

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

ISO8601TimeRange

Time range specified using ISO 8601 format timestamps.

Contents

endTime

End time in ISO 8601 format in Coordinated Universal Time (UTC).

Example: 2024-01-15T12:00:00.000Z

Type: Timestamp

Required: Yes

startTime

Start time in ISO 8601 format in Coordinated Universal Time (UTC).

Example: 2026-11-15T10:28:48.000Z

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

KinesisDataStreamData

Information for telemetry delivery to Kinesis Data Streams.

Contents

kinesisDataStreamArn

ARN of the Kinesis Data Stream to deliver telemetry to.

Type: String

Length Constraints: Minimum length of 37. Maximum length of 275.

Pattern: `arn:[a-z0-9-]{1,63}:kinesis:[a-z0-9]{1,50}:[0-9]{12}:stream/[a-zA-Z0-9_-.]{1,128}`

Required: Yes

kinesisRoleArn

ARN of the IAM Role used by AWS Ground Station to deliver telemetry.

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: `arn:[a-z0-9-]{1,63}:iam::[0-9]{12}:role/[\w+=, .@-]{1,64}`

Required: Yes

See Also

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

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

KmsKey

KMS key info.

Contents

Important

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

kmsAliasArn

KMS Alias Arn.

Type: String

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

Pattern: `arn:aws[a-zA-Z-]{0,16}:kms:[-a-z0-9]{1,50}:[0-9]{12}:(alias/[a-zA-Z0-9:/_-]{1,256})`

Required: No

kmsAliasName

KMS Alias Name.

Type: String

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

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

Required: No

kmsKeyArn

KMS Key Arn.

Type: String

Required: No

See Also

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

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

MaintenanceReservationDetails

Details of a maintenance reservation.

Contents

maintenanceType

Type of maintenance.

Type: String

Valid Values: PLANNED | UNPLANNED

Required: Yes

See Also

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

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

MissionProfileListItem

Item in a list of mission profiles.

Contents

missionProfileArn

ARN of a mission profile.

Type: String

Length Constraints: Minimum length of 89. Maximum length of 138.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:mission-profile/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

missionProfileId

UUID of a mission profile.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

name

Name of a mission profile.

Type: String

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

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

Required: No

region

Region of a mission profile.

Type: String

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

Pattern: `[\w-]+`

Required: No

See Also

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

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

OEMEphemeris

Ephemeris data in Orbit Ephemeris Message (OEM) format.

AWS Ground Station processes OEM ephemerides according to the [CCSDS standard](#) with some extra restrictions. OEM files should be in KVN format. For more detail about the OEM format that AWS Ground Station supports, see [OEM ephemeris format](#) in the AWS Ground Station user guide.

Contents

oemData

OEM data that you provide directly instead of using an Amazon S3 object.

Type: String

Length Constraints: Minimum length of 1.

Pattern: `[\s\S]+`

Required: No

s3Object

The Amazon S3 object that contains the ephemeris data.

Type: [S3Object](#) object

Required: No

See Also

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

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

OemProgramTrackSettings

Program track settings for [OEMEphemeris](#).

Contents

ephemerisId

Unique identifier of the OEM ephemeris.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

See Also

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

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

ProgramTrackSettings

Program track settings for an antenna during a contact.

Contents

Important

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

azEl

Program track settings for [AzElEphemeris](#).

Type: [AzElProgramTrackSettings](#) object

Required: No

oem

Program track settings for [OEMEphemeris](#).

Type: [OemProgramTrackSettings](#) object

Required: No

tle

Program track settings for [TLEEphemeris](#).

Type: [TleProgramTrackSettings](#) object

Required: No

See Also

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

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

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

RangedConnectionDetails

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

Contents

socketAddress

A ranged socket address.

Type: [RangedSocketAddress](#) object

Required: Yes

mtu

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

Type: Integer

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

Required: No

See Also

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

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

RangedSocketAddress

A socket address with a port range.

Contents

name

IPv4 socket address.

Type: String

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

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

Required: Yes

portRange

Port range of a socket address.

Type: [IntegerRange](#) object

Required: Yes

See Also

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

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

ReservationDetails

Details of a ground station reservation.

Contents

Important

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

contact

Details of a contact reservation.

Type: [ContactReservationDetails](#) object

Required: No

maintenance

Details of a maintenance reservation.

Type: [MaintenanceReservationDetails](#) object

Required: No

See Also

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

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

S3Object

Object stored in Amazon 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 Amazon S3 objects, the version to use for the ephemeris.

Type: String

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

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

Required: No

See Also

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

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

S3RecordingConfig

Information about an S3 recording Config.

Contents

bucketArn

ARN of the bucket to record to.

Type: String

Required: Yes

roleArn

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

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: `arn:[a-z0-9-]{1,63}:iam::[0-9]{12}:role/[\w+=,.\@-]{1,64}`

Required: Yes

prefix

S3 Key prefix to preface data files.

Type: String

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

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

Required: No

See Also

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

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

S3RecordingDetails

Details about an S3 recording Config used in a contact.

Contents

bucketArn

ARN of the bucket used.

Type: String

Required: No

keyTemplate

Key template used for the S3 Recording Configuration

Type: String

Required: No

See Also

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

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

SatelliteListItem

Item in a list of satellites.

Contents

currentEphemeris

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

Type: [EphemerisMetaData](#) object

Required: No

groundStations

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

Type: Array of strings

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

Length Constraints: Minimum length of 4. Maximum length of 97.

Pattern: [a-zA-Z0-9-._:=]{4,97}

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

Length Constraints: Minimum length of 82. Maximum length of 132.

Pattern: `arn:aws:groundstation:([-a-z0-9]{1,50})?:[0-9]{12}:satellite/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

satelliteId

UUID of a satellite.

Type: String

Length Constraints: Fixed length of 36.

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

Required: No

See Also

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

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

SecurityDetails

Information about endpoints.

Contents

roleArn

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

Type: String

Length Constraints: Minimum length of 30. Maximum length of 165.

Pattern: `arn:[a-z0-9-]{1,63}:iam::[0-9]{12}:role/[\w+=, .@-]{1,64}`

Required: Yes

securityGroupIds

The security groups to attach to the elastic network interfaces.

Type: Array of strings

Required: Yes

subnetIds

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

Type: Array of strings

Required: Yes

See Also

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

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

- [AWS SDK for Ruby V3](#)

SocketAddress

Information about the socket address.

Contents

name

Name of a socket address.

Type: String

Required: Yes

port

Port of a socket address.

Type: Integer

Required: Yes

See Also

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

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

Source

Dataflow details for the source side.

Contents

configDetails

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

Type: [ConfigDetails](#) object

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

Required: No

configId

UUID of a Config.

Type: String

Required: No

configType

Type of a Config.

Type: String

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

Required: No

dataflowSourceRegion

Region of a dataflow source.

Type: String

Required: No

See Also

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

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

SpectrumConfig

Object that describes a spectral Config.

Contents

bandwidth

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

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

Type: [FrequencyBandwidth](#) object

Required: Yes

centerFrequency

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

Type: [Frequency](#) object

Required: Yes

polarization

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

Type: String

Valid Values: RIGHT_HAND | LEFT_HAND | NONE

Required: No

See Also

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

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

TelemetrySinkConfig

Information about a telemetry sink Config.

Contents

telemetrySinkData

Information about the telemetry sink specified by the `telemetrySinkType`.

Type: [TelemetrySinkData](#) object

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

Required: Yes

telemetrySinkType

The type of telemetry sink.

Type: String

Valid Values: KINESIS_DATA_STREAM

Required: Yes

See Also

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

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

TelemetrySinkData

Information about a telemetry sink.

Contents

Important

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

kinesisDataStreamData

Information about a telemetry sink of type KINESIS_DATA_STREAM.

Type: [KinesisDataStreamData](#) object

Required: No

See Also

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

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

TimeAzEl

Time-tagged azimuth elevation pointing data.

Specifies the antenna pointing direction at a specific time offset from the segment's reference epoch.

Contents

az

Azimuth angle at the specified time.

Valid ranges by unit:

- DEGREE_ANGLE: -180 to 360 degrees, measured clockwise from true north
- RADIAN: $-\pi$ to 2π radians, measured clockwise from true north

Type: Double

Required: Yes

dt

Time offset in atomic seconds from the segment's reference epoch.

All dt values within a segment must be in ascending order with no duplicates.

dt values may be:

- negative
- expressed as fractions of a second
- expressed in scientific notation

Type: Double

Required: Yes

el

Elevation angle at the specified time.

Valid ranges by unit:

- **DEGREE_ANGLE**: -90 to 90 degrees, where 0 is the horizon, 90 is zenith, and negative values are below the horizon
- **RADIAN**: $-\pi/2$ to $\pi/2$ radians, where 0 is the horizon, $\pi/2$ is zenith, and negative values are below the horizon

Type: Double

Required: Yes

See Also

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

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

TimeRange

A time range with a start and end time.

Contents

endTime

Unix epoch timestamp in UTC at which the time range ends.

Type: Timestamp

Required: Yes

startTime

Unix epoch timestamp 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 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. Time ranges must be continuous without gaps or overlaps.

Type: [TimeRange](#) object

Required: Yes

See Also

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

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

TLEEphemeris

Two-line element set (TLE) ephemeris.

For more detail about providing Two-line element sets to AWS Ground Station, see the [TLE section](#) of the AWS Ground Station user guide.

Contents

s3Object

The Amazon S3 object that contains the ephemeris data.

Type: [S3Object](#) object

Required: No

tleData

TLE data that you provide directly instead of using an Amazon S3 object.

Type: Array of [TLEData](#) objects

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

Required: No

See Also

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

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

TleProgramTrackSettings

Program track settings for [TLEEphemeris](#).

Contents

ephemerisId

Unique identifier of the TLE ephemeris.

Type: String

Length Constraints: Fixed length of 36.

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

Required: Yes

See Also

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

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

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: REQUIRED | PREFERRED | REMOVED

Required: Yes

See Also

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

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

TrackingOverrides

Overrides the default tracking configuration on an antenna during a contact.

Contents

`programTrackSettings`

Program track settings to override for antenna tracking during the contact.

Type: [ProgramTrackSettings](#) object

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

Required: No

See Also

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

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

UplinkAwsGroundStationAgentEndpoint

Definition for an uplink agent endpoint

Contents

dataflowDetails

Dataflow details for the uplink endpoint

Type: [UplinkDataflowDetails](#) object

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

Required: Yes

name

Uplink dataflow endpoint name

Type: String

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

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

Required: Yes

See Also

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

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

UplinkAwsGroundStationAgentEndpointDetails

Details for an uplink agent endpoint

Contents

dataflowDetails

Dataflow details for the uplink endpoint

Type: [UplinkDataflowDetails](#) object

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

Required: Yes

name

Uplink dataflow endpoint name

Type: String

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

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

Required: Yes

agentStatus

Status of the agent associated with the uplink dataflow endpoint

Type: String

Valid Values: SUCCESS | FAILED | ACTIVE | INACTIVE

Required: No

auditResults

Health audit results for the uplink dataflow endpoint

Type: String

Valid Values: HEALTHY | UNHEALTHY

Required: No

See Also

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

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

UplinkConnectionDetails

Connection details for customer to Agent and Agent to Ground Station

Contents

agentIpAndPortAddress

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

Type: [RangedConnectionDetails](#) object

Required: Yes

ingressAddressAndPort

Egress address of AgentEndpoint with an optional mtu.

Type: [ConnectionDetails](#) object

Required: Yes

See Also

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

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

UplinkDataflowDetails

Dataflow details for an uplink endpoint

Contents

Important

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

agentConnectionDetails

Uplink connection details for customer to Agent and Agent to Ground Station

Type: [UplinkConnectionDetails](#) object

Required: No

See Also

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

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

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

Length Constraints: Minimum length of 82. Maximum length of 424.

Pattern: `arn:aws:groundstation:[-a-z0-9]{1,50}:[0-9]{12}:config/[a-z0-9]+(-[a-z0-9]+){0,4}/[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}(/.{1,256})?`

Required: Yes

`enabled`

Whether or not an uplink Config is enabled.

Type: Boolean

Required: Yes

See Also

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

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

UplinkSpectrumConfig

Information about the uplink spectral Config.

Contents

centerFrequency

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

Type: [Frequency](#) object

Required: Yes

polarization

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

Type: String

Valid Values: RIGHT_HAND | LEFT_HAND | NONE

Required: No

See Also

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

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

Common Parameters

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

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

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

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key/YYYYMMDD/region/service/aws4_request*.

For more information, see [Create a signed AWS API request](#) in the *IAM User Guide*.

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

Type: string

Required: Conditional

X-Amz-Date

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

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

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string

Required: Conditional

Common Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

NotAuthorized

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

OptInRequired

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

RequestAbortedException

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

RequestEntityTooLargeException

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

RequestTimeoutException

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

ServiceUnavailable

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

ThrottlingException

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

UnknownOperationException

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

UnrecognizedClientException

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

ValidationError

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400