

Clearspan[®] OpEasy Provisioning[®] API Specification

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Clearspan OpEasy Provisioning API
Specification

Release 22.3 – December 2022

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REVISION HISTORY

The following represents the revision history of this publication:

REVISION NUMBER	DATE COMPLETED	POINT OF CONTACT	DESCRIPTION
22.3.1	12/2022	Clearspan Engineering	Initial release

OVERVIEW

The primary purpose of the OpEasy® Provisioning application is to simplify administration of users, features, and devices on the Clearspan® system through a web GUI and bulk provisioning worksheets. Interaction with the OpEasy Provisioning application is now augmented to include an Application Programming Interface (API) so that a customer may programmatically automate such administration.

This document provides a description of the overall API functionality, including its capabilities and limitations along with a description of each available API endpoint that may be used for provisioning operations.

TECHNICAL SUMMARY

The OpEasy Provisioning API is a RESTful, json-based interface that is available for third-party client applications connecting over a TLS-secured TCP/IP connection. The Clearspan Element Management Server (EMS) hosts the API service, communicating directly through an internal TCP socket connection to the existing OpEasy Provisioning application.

Access

In production environments, access to the API-specific TCP port (8000) on the Clearspan EMS will be filtered by a firewall Access Control List (ACL), so an explicit request by a customer for API access from a known IP address (or set of addresses) must be made through the Clearspan Sales or Operations teams prior to any connection attempts.

Authentication and Authorization

The Clearspan Operations team will provide an API-specific username and a matching API key to be used by the client application once successfully connected. The API username/account is restricted by the same organizational hierarchy and privileging rules as other OpEasy administrator accounts. The organizational hierarchy levels are:

- System
 - Solution Reseller
 - Enterprise
 - Group
 - Department

This hierarchy means that a System Administrator account can provision users and devices in all Enterprises, Groups and Departments. A Solution Reseller account can provision users and devices in only its assigned Enterprises, associated Groups and Departments. An Enterprise Administrator account can only provision users and devices in itself, its associated Groups and Departments, and so on.

Requests

A set of API Endpoints is defined to accept json formatted HTTP requests. Endpoint details are described later in this document. Clearspan has developed a Postman 'collection' for aiding the development of client applications. The Postman collection is available at: <insert URL here>

API WORKFLOW

Asynchronous Processing of Requests

The OpEasy Provisioning API is designed with bulk processing in-mind. Due to the nature of bulk create, read, update, and delete (CRUD) operations, they may take a significant amount of time to complete. This will vary depending on a variety of environmental and operational factors. To prevent HTTP client timeouts while these operations are processed, requests will be handled in an asynchronous and non-blocking way.

In practice, this means:

- **Successful requests to the “schedule operation” endpoint will return a 202 Accepted response.**
 - The Response Body will contain an “Scheduled Operation” object, and the Location Header of the response will contain a link to a “Scheduled Operation Status” endpoint.
- **Users may make subsequent GET requests to the provided Scheduled Operation Status endpoint to monitor the progress of the request.**
 - A periodic poll to this endpoint allows this to be automated.
- **Once the request has finished processing, the response to the Scheduled Operation Status endpoint will display that the operation has completed, and provide a link to a Scheduled Operation Results endpoint.**
- **Users may make a GET request to the Scheduled Operation Results endpoint if they would like to see the individual results for the bulk operation.**
 - This is useful to diagnose issues if the operation completed with errors on some resources.

Operations and Scheduled Operations

Operations represent a provisioning operation to be processed by OpEasy that has not yet been scheduled.

- A provisioning operation can contain any combination of provisioning tasks
 - *e.g. User add, modify, delete, Call Center Agent assign/unassign, etc.*
- Operations can be created and initialized with provisioning tasks in a single request.
- Alternatively, operations can be created empty, and provisioning tasks can be built-up with subsequent requests.
- Operations can be built-up using JSON objects. This can be in the form of placing JSON objects in the request body directly, or through uploading a file containing JSON objects (depending on the number of tasks to be added to the operation).

Scheduled Operations are operations that have been scheduled for processing by OpEasy, and can no longer be edited.

- The progress of scheduled operations can be monitored through a dedicated status endpoint.

- Once complete, the detailed results of scheduled operations can be viewed through a dedicated results endpoint.

Once a Scheduled Operation has completed processing, both the Scheduled Operation and the original Operation must be deleted.

- The Scheduled Operation must be deleted before the Operation.
- The Scheduled Operation must be in a completed state (i.e. COMPLETED or COMPLETED_WITH_ERRORS) before it can be deleted.
- See the Delete Operation and Delete Scheduled Operation endpoints on the API Specification document for more information about these endpoints.

Process of Operations

1. Create new Operation (optionally initialising the operation with provisioning tasks).
 2. Add additional tasks to the Operation (if required).
 3. Check for validation errors on the Operation.
 - a. If there are validation errors (**if not, then skip to step 4**):
 - i. View the validation errors to see the issues that occurred.
 - ii. Delete the validation errors.
 - iii. Append new task(s) to the Operation that fix the validation errors.
 - iv. Re-check for validation errors.
 - v. Repeat until there are no more validation errors on the operation.
 4. Schedule the Operation to be processed by OpEasy.
 5. Periodic poll to Operation Status endpoint to check if Operation has completed processing.
 6. Once operation has completed processing, get the results of the Operation.
 7. Delete the Scheduled Operation that has just completed.
 8. Delete the Operation related to the Scheduled Operation.
-

File Upload for Very Large Datasets

Overview

There may be times when performing provisioning tasks where very large sets of data must be created.

- *e.g. Creating thousands of users at once, or modifying phone numbers for all existing users, etc.*

It's very possible that these operations may be so large that they would exceed the web server's file size limits for HTTP request bodies.

For this reason, the OpEasy Provisioning API allows provisioning tasks to be added to an operation via file upload, rather than needing to send multiple smaller requests to ensure the request body size is small enough.

The uploaded file should have an extension of ".json", and the file content should be formatted exactly the same as if the data were sent in the request body.

Supported Endpoints

- Create New Operation
- Append Tasks to Existing Operation

Enabling File Upload on Supported Endpoints

1. Ensure the file to be uploaded has a “.json” extension, and contains valid JSON data.
2. Add the following header to the request: Content-Type: multipart/form-data
3. The form data should contain the following:

Name	Description	Content Disposition	Content Type
enterpriseld	The ID of the Enterprise.	form-data; name="enterpriseld"	text/plain
file	The JSON file to upload.	form-data; name="file"; filename="{{filename}}"	application/json

File Download for Very Large Datasets

Overview

As with file upload, when dealing with very large datasets, there will be large amounts of JSON data to feed back to clients.

- *e.g. Returning results for very large datasets, viewing tasks added to very large operations, etc.*

This API paginates list results to prevent overloading of clients when responses are very large, but also offers the capability to return a JSON file download if this is preferred by the client.

The file content will be formatted exactly the same as if it were returned in the request body, but without the fields for pagination.

Supported Endpoints

- Get User-related Tasks on Existing Operation
- Get Call Center Agent-related Tasks on Existing Operation
- Get Call Recording-related Tasks on Existing Operation
- Get All “Users” Validation Errors on Operation
- Get All “CallCenterAgent” Validation Errors on Operation
- Get All “CallRecording” Validation Errors on Operation
- View User-related Results for Completed Scheduled Operation
- View Call Center Agent-related Results for Completed Scheduled Operation
- View Call Recording-related Results for Completed Scheduled Operation

Enabling File Download on Supported Endpoints

On a supported endpoint, ensure the following Accept header is present:

- Accept: application/octet-stream

By adding this header, the OpEasy Provisioning API will know to serve the response as a JSON file attachment instead of returning the response in the Response Body.

Validation Error Handling

When creating and appending tasks to Operations, the OpEasy Provisioning API completes some basic validation to ensure the tasks are in the correct format to be sent to OpEasy when the operation is scheduled.

If validation fails for a particular task, the operation is still created, but the tasks that fail validation do not get added to the tasks on the created Operation.

Instead, they get added to a set of “Validation Errors”, which must be resolved before the Operation can be scheduled for processing by OpEasy.

The OpEasy Provisioning API provides the following endpoints for viewing Validation Errors on an Operation:

Get All Users Validation Errors

- *GET - /v1/operations/{operation-id}/users/validationerrors*

Get Specific Users Validation Error

- *GET - /v1/operations/{operation-id}/users/validationerrors/{validation-error-id}*

Get All Call Center Agent Validation Errors

- *GET - /v1/operations/{operation-id}/callcenteragent/validationerrors*

Get Specific Call Center Agent Validation Error

- *GET - /v1/operations/{operation-id}/callcenteragent/validationerrors/{validation-error-id}*

Get All Call Recording Validation Errors

- *GET - /v1/operations/{operation-id}/callrecording/validationerrors*

Get Specific Call Recording Validation Error

- *GET - /v1/operations/{operation-id}/callrecording/validationerrors/{validation-error-id}*

Once a validation error has been viewed, it can be deleted from the Operation. The OpEasy Provisioning API provides the following endpoints for deleting Validation Errors on an Operation:

Delete Users Validation Error

- *DELETE - /v1/operations/{operation-id}/users/validationerrors/{validation-error-id}*

Delete Call Center Agent Validation Error

- *DELETE - /v1/operations/{operation-id}/callcenteragent/validationerrors/{validation-error-id}*

Delete Call Recording Validation Error

- *DELETE - /v1/operations/{operation-id}/callcenteragent/validationerrors/{validation-error-id}*

After deleting the validation error(s), the Operation can now be scheduled without those tasks present if desired.

Otherwise, the OpEasy Provisioning API provides an endpoint for appending tasks to the Operation using a HTTP PATCH method. This may be used to replace the task that failed validation with an updated task that fixes the issues outlined by the API:

- *PATCH - /v1/operations/{operation-id}*

Webhook Callback Support

Webhook callbacks have been included into the API as an alternative to polling for status updates on Scheduled Operations where applications support them.

An application can receive Webhook callbacks by using the API to register a URL to receive Callbacks on. See the “Register new Webhook Receiver” endpoint on the API Specification document for the exact details for this request.

Webhook Callbacks are sent as HTTP POST requests and can only be sent via HTTPS. **Webhook Receivers cannot currently be registered with a non-HTTPS URL value.**

Webhooks are sent on a per-enterprise basis. For example, if a Webhook Receiver is registered to receive “scheduledOperation.statusChanged” events, it would receive an event every time the status changes on any Scheduled Operation on the Enterprise.

Webhook Callbacks must be responded-to with 200 OK status code, and an empty response body.

Webhook Callback Limitations

- Webhooks can only be registered and sent to URLs with a “https://” scheme. “http://” URLs are unsupported.
- If an OpEasy node failure occurs, then Webhooks will not be sent for ongoing Scheduled Operations that were initiated against that OpEasy node. **As a precaution, the “status” endpoint for the scheduled operation should still be polled periodically for a status update (e.g. after a set time limit for not receiving a Webhook callback for a particular Scheduled Operation).**

Supported Callback Types

Scheduled Operation Status Changed

Callback informing that the “status” field of a Scheduled Operation has been updated. E.g. When a Scheduled Operation moves from “pending” to “processing”, “processing” to “completed”, or “processing” to “completedWithErrors”.

Callback Fields

Field Name	Type	Description
event	JSON Object	JSON Object containing information about the Webhook Callback event.
event.type	String	The type of callback event this is. For a Scheduled Operation Status Changed event, this will always be

		"scheduledOperation.statusChanged"
event.previousStatus	String	The previous status of the Scheduled Operation.
event.newStatus	String	The latest status of the Scheduled Operation.
event.scheduledOperation	JSON Object	JSON Object containing information about the Scheduled Operation that has just had its status updated.

Callback Examples

1 SCHEDULED OPERATION MOVED FROM pending TO processing:

```

2 {
3   "event": {
4     "type": "scheduledOperation.statusChanged",
5     "previousStatus": "pending",
6     "newStatus": "processing",
7     "scheduledOperation": {
8       "id": "b0a6ed2e0e5d40c383e7709b6469469b",
9       "status": "processing",
10      "startTime": "2022-11-16T12:02:58.321+00:00",
11      "operation": {
12        "id": "c0debec94fe54c38968d884547640a32",
13        "enterpriseId": "enterprise-id"
14      }
15    }
16  }

```

17 }

18

19 SCHEDULED OPERATION MOVED FROM processing TO completed:

```

20 {
21   "event": {
22     "type": "scheduledOperation.statusChanged",
23     "previousStatus": "processing",
24     "newStatus": "completed",
25     "scheduledOperation": {
26       "id": "b0a6ed2e0e5d40c383e7709b6469469b",
27       "status": "completed",

```

```

28         "startTime": "2022-11-16T12:02:58.321+00:00",
29         "completedTime": "2022-11-16T12:04:30.456+00:00",
30         "operation": {
31             "id": "c0debec94fe54c38968d884547640a32",
32             "enterpriseId": "enterprise-id"
33         },
34         "links": {
35             "results": "/v1/scheduledoperations/{scheduled-
operation-id}/results"
36         }
37     }
38 }
39}
40
41SCHEDULED OPERATION MOVED FROM processing TO completedWithErrors:
42{
43     "event": {
44         "type": "scheduledOperation.statusChanged",
45         "previousStatus": "processing",
46         "newStatus": "completedWithErrors",
47         "scheduledOperation": {
48             "id": "b0a6ed2e0e5d40c383e7709b6469469b",
49             "status": "completedWithErrors",
50             "startTime": "2022-11-16T12:02:58.321+00:00",
51             "completedTime": "2022-11-16T12:04:30.456+00:00",
52             "operation": {
53                 "id": "c0debec94fe54c38968d884547640a32",
54                 "enterpriseId": "enterprise-id"
55             },
56             "links": {
57                 "results": "/v1/scheduledoperations/{scheduled-
operation-id}/results"
58             }
59         }
60     }
61}

```

API ENDPOINTS

Authenticate with API

Using an API Key provided by Clearspan, along with an Enterprise ID, authenticate with the API to create a time-limited “Authentication Session”. The length of an Authentication Session is 1 hour.

The result (if successful) is a token that is valid for the entire period of the Authentication Session (1 hour). This token must be added to the Authorization header of further requests to the API.

Once the Authentication Session has expired, the token will no longer be valid, so another request must be made to this endpoint.

HTTP POST - */v1/authsessions*

Path Variables

None.

Query Parameters

None.

Required Headers

- Accept: application/json
- Content-Type: application/json

Request Body Fields

Field Name	Type	Description
authSession	JSON Object	JSON Object containing information used to authenticate with the API and create an Authentication Session.
authSession.apiKey	String	API Key provided by Clearspan used to authenticate a specific “API Administrator” under an Enterprise.
authSession.enterpriseId	String	Identifier for the Enterprise to authenticate for.

WEBHOOK ENDPOINTS

Register new Webhook Receiver

Registers a URL to receive Webhook Callback Events for a particular Enterprise ID. Allows the ability to define the exact event types to subscribe to receive. Currently the only supported Event Type is “**scheduledOperation.statusChanged**”.

HTTP POST - */v1/webhooks*

Path Variables

None.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json
- Content-Type: application/json

Request Body Fields

Field Name	Type	Description
enterpriseld	String	The ID of the enterprise to register the Webhook Receiver for.
url	String	The URL that Webhook callback events will be sent to.
events	JSON List	List of event types this Webhook Receiver is subscribed to receive.
events[0]	String	String representing the type of callback event to subscribe to receive. Currently the only event type supported is: <ul style="list-style-type: none"> • scheduledOperation.statusChanged

Request Body Example

```
{
  "enterpriseId": "enterprise-id",
  "url": "https://127.0.0.1:9000/webhook",
  "events": [
    "scheduledOperation.statusChanged"
  ]
}
```

Response Body Fields

Field Name	Type	Description
webhook	JSON Object	JSON Object containing information about the Webhook Receiver that was just registered.
webhook.id	String	Unique ID for this Webhook Receiver.
webhook.enterpriseId	String	The ID of the enterprise the Webhook Receiver is registered to receive events for.
webhook.url	String	The URL that Webhook callback events will be sent to.
webhook.events	JSON List	List of event types this Webhook Receiver is subscribed to receive.
webhook.events[0]	String	String representing the type of callback event that the Webhook Receiver is subscribed to. Currently the only event type supported is: <ul style="list-style-type: none"> scheduledOperation.statusChanged

Response Body Example

```
201 CREATED
{
  "webhook": {
    "id": "e4845ff8ef5f4e838b863fcac8fe3d48",
    "enterpriseId": "enterprise-id",
    "url": "https://127.0.0.1:9000/webhook",
    "events": [
      "scheduledOperation.statusChanged"
    ]
  }
}
```

Response Status Codes

Success

- 201 Created - Successfully registered Webhook Receiver.

Error

- 400 Bad Request - A validation error occurred on the request body.
- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Enterprise provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Get All Webhook Receivers for Enterprise

Retrieves a list of all Webhook Receivers registered for the Enterprise that the authenticated API Administrator belongs to.

HTTP GET - */v1/webhooks*

Path Variables

None.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
webhooks	JSON List	JSON List containing Webhook Receivers that are registered for the given Enterprise ID.
webhooks[0]	JSON Object	JSON Object containing information about a particular Webhook Receiver.
webhooks[0].id	String	Unique ID for this Webhook Receiver.
webhooks[0].enterpriseId	String	The ID of the enterprise the Webhook Receiver is registered to receive events for.
webhooks[0].url	String	The URL that Webhook callback events will be sent to.

webhooks[0].events	JSON List	List of event types this Webhook Receiver is subscribed to receive.
webhooks[0].events[0]	String	String representing the type of callback event that the Webhook Receiver is subscribed to. Currently the only event type supported is: <ul style="list-style-type: none"> • scheduledOperation.statusChanged

Response Body Example

```
200 OK
{
  "webhooks": [
    {
      "id": "e4845ff8ef5f4e838b863fcac8fe3d48",
      "enterpriseId": "enterprise-id",
      "url": "https://127.0.0.1:9000/webhook",
      "events": [
        "scheduledOperation.statusChanged"
      ]
    },
    ...
  ]
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved Webhook Receivers.

Error

- 401 Unauthorized - An authentication error occurred.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Get Webhook Receiver by ID

Retrieves a particular Webhook Receiver by its ID on the Enterprise that the authenticated API Administrator belongs to.

HTTP GET - `/v1/webhooks/{webhook-id}`

Path Variables

- **webhook-id** - The ID of the Webhook Receiver to retrieve.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
webhook	JSON Object	JSON Object containing information about a particular Webhook Receiver.
webhook.id	String	Unique ID for this Webhook Receiver.
webhook.enterpriseId	String	The ID of the enterprise the Webhook Receiver is registered to receive events for.
webhook.url	String	The URL that Webhook callback events will be sent to.
webhook.events	JSON List	List of event types this Webhook Receiver is subscribed to receive.

webhook.events[0]	String	<p>String representing the type of callback event that the Webhook Receiver is subscribed to.</p> <p>Currently the only event type supported is:</p> <ul style="list-style-type: none"> • scheduledOperation.statusChanged
-------------------	--------	--

Response Body Example

```
200 OK
{
  "webhook": {
    "id": "e4845ff8ef5f4e838b863fcac8fe3d48",
    "enterpriseId": "enterprise-id",
    "url": "https://127.0.0.1:9000/webhook",
    "events": [
      "scheduledOperation.statusChanged"
    ]
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved the Webhook Receiver by its ID.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - No Webhook Receiver was found matching the given ID.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Un-register/Remove Webhook Receiver

Un-registers an existing Webhook Receiver, removing it from the system, so that no further Webhook Callback Events are sent out to that particular URL.

HTTP DELETE - `/v1/webhooks/{webhook-id}`

Path Variables

- **webhook-id** - The ID of the Webhook Receiver to un-register.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully un-registered the Webhook Receiver with the provided ID.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - No Webhook Receiver was found matching the given ID.

Response Headers

None.

OPERATIONS ENDPOINTS

Create New Operation

Creates a new Operation, optionally initialized with provisioning tasks in either the Request Body or via JSON File Upload.

This endpoint supports File Upload. See the '[API Workflow](#)' section for more information.

HTTP POST - */v1/operations*

Path Variables

None.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json
- Content-Type: application/json **OR** Content-Type: multipart/form-data

Request Body Fields

Field Name	Type	Description
enterpriseld	String	The ID of the enterprise to create the operation for.
tasks	JSON Object	JSON Object containing the various types of tasks that can be carried out (e.g., User tasks, Call Center Agent tasks, etc.)
tasks.users	JSON List	JSON List containing various provisioning tasks relating to Users.
tasks.users[0]	JSON Object	JSON Object containing the information about the User provisioning task to be carried out.

tasks.users[0].command	String	String representing the command for the task. See Appendix I for more information on the available commands.
tasks.users[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix I for more information on the required fields per-command.
tasks.callCenterAgent	JSON List	JSON List containing various provisioning tasks relating to Call Center Agents.
tasks.callCenterAgent[0]	JSON Object	JSON Object containing the information about the Call Center Agent provisioning task to be carried out.
tasks.callCenterAgent[0].command	String	String representing the command for the task. See Appendix II for more information on the available commands.
tasks.callCenterAgent[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix II for more information on the required fields per-command.
tasks.callRecording	JSON List	JSON List containing various provisioning tasks relating to Call Recording Configuration for existing users.
tasks.callRecording[0]	JSON Object	JSON Object containing the information about the Call Recording Configuration provisioning task to be carried out.

tasks.callRecording[0].command	String	String representing the command for the task. See Appendix III for more information on the available commands.
tasks.callRecording[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix III for more information on the required fields per-command.

Request Body Example

```
{
  "enterpriseId": "enterprise-id",
  "tasks": {
    "Users": [
      {
        "command": "AddUser",
        "content": {
          {add-user-fields}
        }
      },
      {
        "command": "AddDevice",
        "content": {
          {add-device-fields}
        }
      }
    ],
    "CallCenterAgent": [
      {
        "command": "Assign",
        "content": {
          {assign-call-center-agent-fields}
        }
      },
      {
        "command": "Remove",
        "content": {
          {remove-call-center-agent-fields}
        }
      }
    ],
    "CallRecording": [
      {
        "command": "Modify",
        "content": {
          {modify-call-recording-fields}
        }
      }
    ]
  }
}
```

```

    },
    {
      "command": "Modify",
      "content": {
        {modify-call-recording-fields}
      }
    },
  ]
}

```

Response Body Fields

Field Name	Type	Description
operation	JSON Object	JSON Object containing information about the operation that was just created.
operation.enterpriseId	String	The ID of the enterprise the operation has been created for.
operation.id	String	Unique ID for this operation.
tasks	JSON Object	JSON Object containing links to the various types of task on this operation.
tasks.Users	JSON Object	Contains information on Users tasks as part of the operation.
tasks.Users.size	Integer	Total number of Users tasks on the operation.
tasks.Users.href	String	String containing a link to the tasks relating to Users on this operation.
tasks.Users.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Users tasks added to the Operation. Contains a summary of Users validation errors.
tasks.Users.validationErrors.size	Integer	Total number of Users validation errors.
tasks.Users.validationErrors.href	String	Href link to the endpoint to view all Users validation errors on the operation.

tasks.CallCenterAgent	JSON Object	Contains information on Call Center Agent tasks as part of the operation.
tasks.CallCenterAgent.size	Integer	Total number of Call Center Agent tasks on the operation.
tasks.CallCenterAgent.href	String	String containing a link to the tasks relating to Call Center Agents on this operation.
tasks.CallCenterAgent.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Center Agent tasks added to the Operation. Contains a summary of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.size	Integer	Total number of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.href	String	Href link to the endpoint to view all Call Center Agent validation errors on the operation.
tasks.CallRecording	JSON Object	String containing a link to the tasks relating to Call Recording Configuration on this operation.
tasks.CallRecording.size	Integer	Total number of Call Recording Configuration tasks on the operation.
tasks.CallRecording.href	String	String containing a link to the tasks relating to Call Recording Configuration on this operation.
tasks.CallRecording.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Recording tasks added to the Operation. Contains a summary of Call Recording validation errors.
tasks.CallRecording.validationErrors.size	Integer	Total number of Call Recording validation errors.
tasks.CallRecording.validationErrors.href	String	Href link to the endpoint to view all Call Recording validation errors on the operation.

Response Body Example

201 CREATED - No Validation Errors

```
{
  "operation": {
    "enterpriseId": "enterprise-id",
    "id": "56033e1d5f2d4154b958b44a5702a964",
    "tasks": {
      "Users": {
        "size": 50,
        "href": "/v1/operations/{operationId}/users"
      },
      "CallCenterAgent": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callcenteragent"
      },
      "CallRecording": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callrecording"
      }
    }
  }
}
```

201 CREATED - Validation Errors on "Users" tasks

```
{
  "operation": {
    "enterpriseId": "enterprise-id",
    "id": "56033e1d5f2d4154b958b44a5702a964",
    "tasks": {
      "Users": {
        "size": 47,
        "href": "/v1/operations/{operationId}/users",
        "validationErrors": {
          "size": 3,
          "href":
"/v1/operations/{operationId}/users/validationerrors"
        }
      },
      "CallCenterAgent": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callcenteragent"
      },
      "CallRecording": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callrecording"
      }
    }
  }
}
```

Response Status Codes

Success

- 201 Created - Successfully created operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - Either the Enterprise or Group provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Append tasks to Existing Operation

Appends tasks to an existing Operation either through the JSON Request Body, or via File Upload.

This endpoint supports File Upload. See the [‘API Workflow’](#) section for more information.

HTTP PATCH - */v1/operations/{operation-id}*

Path Variables

- **operation-id** - The ID of the operation to append provisioning tasks to.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json
- Content-Type: application/json **OR** Content-Type: multipart/form-data

Request Body Fields

Field Name	Type	Description
------------	------	-------------

tasks	JSON Object	JSON Object containing the various types of task that can be carried out (e.g. User tasks, Call Center Agent tasks, etc.)
tasks.users	JSON List	JSON List containing various provisioning tasks relating to Users.
tasks.users[0]	JSON Object	JSON Object containing the information about the User provisioning task to be carried out.
tasks.users[0].command	String	String representing the command for the task. See Appendix I for more information on the available commands.
tasks.users[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix I for more information on the required fields per-command.
tasks.callCenterAgent	JSON List	JSON List containing various provisioning tasks relating to Call Center Agents.
tasks.callCenterAgent[0]	JSON Object	JSON Object containing the information about the Call Center Agent provisioning task to be carried out.
tasks.callCenterAgent[0].command	String	String representing the command for the task. See Appendix II for more information on the available commands.
tasks.callCenterAgent[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix II for more information on the required fields per-command.

tasks.callRecording	JSON List	JSON List containing various provisioning tasks relating to Call Recording Configuration for existing users.
tasks.callRecording[0]	JSON Object	JSON Object containing the information about the Call Recording Configuration provisioning task to be carried out.
tasks.callRecording[0].command	String	String representing the command for the task. See Appendix III for more information on the available commands.
tasks.callRecording[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task. Varies based on the command. See Appendix III for more information on the required fields per-command.

Request Body Example

```
{
  "tasks": {
    "Users": [
      {
        "command": "AddUser",
        "content": {
          {add-user-fields}
        }
      },
      {
        "command": "AddDevice",
        "content": {
          {add-device-fields}
        }
      }
    ],
    "CallCenterAgent": [
      {
        "command": "Assign",
        "content": {
          {assign-call-center-agent-fields}
        }
      },
      {
        "command": "Remove",
        "content": {
          {remove-call-center-agent-fields}
        }
      }
    ]
  }
}
```

```

    }
  },
  ],
  "CallRecording": [
    {
      "command": "Modify",
      "content": {
        {modify-call-recording-fields}
      }
    },
    {
      "command": "Modify",
      "content": {
        {modify-call-recording-fields}
      }
    }
  ],
]
}

```

Response Body Fields

Field Name	Type	Description
operation	JSON Object	JSON Object containing information about the operation that was just created.
operation.enterpriseId	String	The ID of the enterprise the operation has been created for.
operation.id	String	Unique ID for this operation.
tasks	JSON Object	JSON Object containing links to the various types of task on this operation.
tasks.Users	JSON Object	Contains information on Users tasks as part of the operation.
tasks.Users.size	Integer	Total number of Users tasks on the operation.
tasks.Users.href	String	String containing a link to the tasks relating to Users on this operation.

tasks.Users.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Users tasks added to the Operation. Contains a summary of Users validation errors.
tasks.Users.validationErrors.size	Integer	Total number of Users validation errors.
tasks.Users.validationErrors.href	String	Href link to the endpoint to view all Users validation errors on the operation.
tasks.CallCenterAgent	JSON Object	Contains information on Call Center Agent tasks as part of the operation.
tasks.CallCenterAgent.size	Integer	Total number of Call Center Agent tasks on the operation.
tasks.CallCenterAgent.href	String	String containing a link to the tasks relating to Call Center Agents on this operation.
tasks.CallCenterAgent.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Center Agent tasks added to the Operation. Contains a summary of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.size	Integer	Total number of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.href	String	Href link to the endpoint to view all Call Center Agent validation errors on the operation.
tasks.CallRecording	JSON Object	String containing a link to the tasks relating to Call Recording Configuration on this operation.
tasks.CallRecording.size	Integer	Total number of Call Recording Configuration tasks on the operation.
tasks.CallRecording.href	String	String containing a link to the tasks relating to Call Recording Configuration on this operation.

tasks.CallRecording.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Recording tasks added to the Operation. Contains a summary of Call Recording validation errors.
tasks.CallRecording.validationErrors.size	Integer	Total number of Call Recording validation errors.
tasks.CallRecording.validationErrors.href	String	Href link to the endpoint to view all Call Recording validation errors on the operation.

Response Body Example

```
200 OK
{
  "operation": {
    "enterpriseId": "enterprise-id",
    "id": "56033e1d5f2d4154b958b44a5702a964",
    "tasks": {
      "Users": {
        "size": 50,
        "href": "/v1/operations/{operationId}/users"
      },
      "CallCenterAgent": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callcenteragent"
      },
      "CallRecording": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callrecording"
      }
    }
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully appended tasks.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Get a Specific Operation

Retrieves a specific Operation by its ID.

HTTP GET - `/v1/operations/{operation-id}`

Path Variables

- **operation-id** - The ID of the operation to retrieve.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
operation	JSON Object	JSON Object containing information about the operation that was just created.
operation.enterpriseId	String	The ID of the enterprise the operation has been created for.
http://operation.id	String	Unique ID for this operation.
tasks	JSON Object	JSON Object containing links to the various types of task on this operation.

tasks.Users	JSON Object	Contains information on Users tasks as part of the operation.
tasks.Users.size	Integer	Total number of Users tasks on the operation.
tasks.Users.href	String	String containing a link to the tasks relating to Users on this operation.
tasks.Users.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Users tasks added to the Operation. Contains a summary of Users validation errors.
tasks.Users.validationErrors.size	Integer	Total number of Users validation errors.
tasks.Users.validationErrors.href	String	Href link to the endpoint to view all Users validation errors on the operation.
tasks.CallCenterAgent	JSON Object	Contains information on Call Center Agent tasks as part of the operation.
tasks.CallCenterAgent.size	Integer	Total number of Call Center Agent tasks on the operation.
tasks.CallCenterAgent.href	String	String containing a link to the tasks relating to Call Center Agents on this operation.
tasks.CallCenterAgent.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Center Agent tasks added to the Operation. Contains a summary of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.size	Integer	Total number of Call Center Agent validation errors.
tasks.CallCenterAgent.validationErrors.href	String	Href link to the endpoint to view all Call Center Agent validation errors on the operation.

tasks.CallRecording	JSON Object	String containing a link to the tasks relating to Call Recording Configuration on this operation.
tasks.CallRecording.size	Integer	Total number of Call Recording Configuration tasks on the operation.
tasks.CallRecording.href	String	String containing a link to the tasks relating to Call Recording Configuration on this operation.
tasks.CallRecording.validationErrors	JSON Object	Only present if one or more validation errors occurred for the Call Recording tasks added to the Operation. Contains a summary of Call Recording validation errors.
tasks.CallRecording.validationErrors.size	Integer	Total number of Call Recording validation errors.
tasks.CallRecording.validationErrors.href	String	Href link to the endpoint to view all Call Recording validation errors on the operation.

Response Body Example

200 OK

```
{
  "operation": {
    "enterpriseId": "enterprise-id",
    "id": "56033e1d5f2d4154b958b44a5702a964",
    "tasks": {
      "Users": {
        "size": 50,
        "href": "/v1/operations/{operationId}/users"
      },
      "CallCenterAgent": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callcenteragent"
      },
      "CallRecording": {
        "size": 50,
        "href": "/v1/operations/{operationId}/callrecording"
      }
    }
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved Operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Get User-related Tasks of a Specific Operation

This endpoint supports File Download. See the '[API Workflow](#)' section for more information.

Retrieves Users-specific tasks on a specified Operation.

HTTP GET - */v1/operations/{operation-id}/users*

Path Variables

- **operation-id** - The ID of the operation to retrieve user-related tasks for.

Query Parameters

Parameter Name	Type	Description
pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages
users	JSON List	JSON List containing various provisioning tasks relating to Users.
users[0]	JSON Object	JSON Object containing the information about the User provisioning task to be carried out.
users[0].command	String	String representing the command for the task.
users[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task.

Response Body Example

```

200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "Users": [
    {
      "command": "AddUser",
      "content": {
        {add-user-fields}
      }
    },
    {
      "command": "AddDevice",
      "content": {
        {add-device-fields}
      }
    },
    ...
    ...
  ]
}

```


Response Status Codes

Success

- 200 OK - Successfully retrieved tasks for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Get Call Center Agent-related Tasks of a Specific Operation

This endpoint supports **File Download**. See the '[API Workflow](#)' section for more information.

Retrieves Call Center Agent-specific tasks on a specified Operation.

HTTP GET - */v1/operations/{operation-id}/callcenteragent*

Path Variables

- **operation-id** - The ID of the operation to retrieve call center agent tasks for.

Query Parameters

Parameter Name	Type	Description
pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages
CallCenterAgent	JSON List	JSON List containing various provisioning tasks relating to Call Center Agents.
CallCenterAgent[0]	JSON Object	JSON Object containing the information about the Call Center Agent provisioning task to be carried out.
CallCenterAgent[0].command	String	String representing the command for the task.
CallCenterAgent[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task.

Response Body Example

```
200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "CallCenterAgent": [
    {
      "command": "Assign",
      "content": {
```

```

        {assign-call-center-agent-fields}
      },
      {
        "command": "Remove",
        "content": {
          {remove-call-center-agent-fields}
        }
      },
      ...
    ]
  }

```

Response Status Codes

Success

- 200 OK - Successfully retrieved tasks for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Get Call Recording Configuration-related Tasks of a Specific Operation

This endpoint supports File Download. See the [‘API Workflow’](#) section for more information.

Retrieves Call Recording Configuration-specific tasks on a specified Operation.

HTTP GET - */v1/operations/{operation-id}/callrecording*

Path Variables

- **operation-id** - The ID of the operation to retrieve call recording tasks for.

Query Parameters

Parameter Name	Type	Description
pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages.
CallRecording	JSON List	JSON List containing various provisioning tasks relating to Call Recording Configuration.
CallRecording[0]	JSON Object	JSON Object containing the information about the Call Recording Configuration task to be carried out.
CallRecording[0].command	String	String representing the command for the task.

CallRecording[0].content	JSON Object	JSON Object containing the fields related to the resource to be affected by the provisioning task.
--------------------------	-------------	--

Response Body Example

200 OK

```
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "CallRecording": [
    {
      "command": "Modify",
      "content": {
        "modify-call-recording-fields"
      }
    },
    {
      "command": "Modify",
      "content": {
        "modify-call-recording-fields"
      }
    },
    ...
    ...
  ]
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved tasks for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Get All “Users” Validation Errors on Operation

This endpoint supports File Download. See the '[API Workflow](#)' section for more information.

Gets all validation errors on the operation related to “Users” tasks.

HTTP GET - `/v1/operations/{operation-id}/users/validationerrors`

Path Variables

- **operation-id** - The ID of the operation to get “Users” validation errors for.

Query Parameters

- **page_size** - The maximum number of items that can be displayed on a single page of results. Defaults to 50.
- **page_number** - The page number to be returned. Starts at 0, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	The maximum number of results that can be returned on the page.
pageNumber	Integer	The current page of results.
totalPages	Integer	The total number of pages of results
totalItems	Integer	The total number of results across all pages.
Users	JSON List	JSON List of all Validation Errors that occurred in “Users” tasks.

Users[0]	JSON Object	JSON Object containing information about the Validation Error that has occurred, and the task that the validation error was found in.
Users[0].id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
Users[0].validationErrors	JSON List	List of String validation error messages for the task.
Users[0].validationErrors[0]	String	An error message describing the validation error that has occurred for this task.
Users[0].task	JSON Object	JSON object containing the task that the validation error occurred on.

Response Body Example

200 OK

```
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "Users": [
    {
      "id": "77846af043714dd7a981427decfc71c1",
      "validationErrors": [
        "Validation Error Message 1",
        "Validation Error Message 2",
        ...
      ],
      "task": {
        "command": "AddUser",
        "content": {
          {add-user-fields}
        }
      }
    },
    {
      "id": "77846af043714dd7a981427decfc71c1",
      "validationErrors": [
        "Validation Error Message 1",
        "Validation Error Message 2",
        ...
      ],
      "task": {
        "command": "AddUser",
        "content": {
          {add-user-fields}
        }
      }
    }
  ]
}
```

```

    }
  },
  ...
  ...
]
}
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved page of “Users” validation errors.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Get Specific “Users” Validation Error on Operation

Gets a specific validation error related to a “Users” task by its ID.

HTTP GET - */v1/operations/{operation-id}/users/validationerrors/{validation-error-id}*

Path Variables

- **operation-id** - The ID of the operation to get “Users” validation errors for.
- **validation-error-id** - The ID of the validation error to retrieve.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
validationErrors	JSON List	List of String validation error messages that occurred for the task.
validationErrors[0]	String	An error message describing the validation error that has occurred for this task.
validationError.task	JSON Object	JSON object containing the task that the validation error occurred on.

Response Body Example

```
200 OK
{
  "id": "77846af043714dd7a981427decfc71c1",
  "validationErrors": [
    "validation error message 1",
    "validation error message 2",
    ...
  ],
  "task": {
    "command": "AddUser",
    "content": {
      {add-user-fields}
    }
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved validation error.

Error

- 401 Unauthorized - An authentication error occurred.

- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Delete “Users” Validation Error on Operation

Deletes a specific validation error related to a “Users” task from the operation, so that a new task may be appended to the operation which fixes the validation error.

HTTP DELETE - */v1/operations/{operation-id}/users/validationerrors/{validation-error-id}*

Path Variables

- **operation-id** - The ID of the operation to delete “Users” validation errors for.
- **validation-error-id** - The ID of the validation error to delete.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully deleted validation error.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

None.

Get All “CallCenterAgent” Validation Errors on Operation

This endpoint supports File Download. See the [‘API Workflow’](#) section for more information.

Gets all validation errors on the operation related to “CallCenterAgent” tasks.

HTTP GET - */v1/operations/{operation-id}/callcenteragent/validationerrors*

Path Variables

- **operation-id** - The ID of the operation to get “CallCenterAgent” validation errors for.

Query Parameters

- **page_size** - The maximum number of items that can be displayed on a single page of results. Defaults to 50.
- **page_number** - The page number to be returned. Starts at 0, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	The maximum number of results that can be returned on the page.
pageNumber	Integer	The current page of results.
totalPages	Integer	The total number of pages of results
totalItems	Integer	The total number of results across all pages.
CallCenterAgent	JSON List	JSON List of all Validation Errors that occurred in "CallCenterAgent" tasks.
CallCenterAgent[0]	JSON Object	JSON Object containing information about the Validation Error that has occurred, and the task that the validation error was found in.
CallCenterAgent[0].id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
CallCenterAgent[0].validationErrors	JSON List	List of String validation error messages for the task.
CallCenterAgent[0].validationErrors[0]	String	An error message describing the validation error that has occurred for this task.
CallCenterAgent[0].task	JSON Object	JSON object containing the task that the validation error occurred on.

Response Body Example

```
200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "CallCenterAgent": [
```

```

{
  "id": "77846af043714dd7a981427decfc71c1",
  "validationErrors": [
    "validation error message 1",
    "validation error message 2",
    ...
  ],
  "task": {
    "command": "Assign",
    "content": {
      {assign-call-center-agent-fields}
    }
  }
},
{
  "id": "77846af043714dd7a981427decfc71c1",
  "validationErrors": [
    "validation error message 1",
    "validation error message 2",
    ...
  ],
  "task": {
    "command": "Remove",
    "content": {
      {remove-call-center-agent-fields}
    }
  }
},
...
...
]
}
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved page of “Users” validation errors.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Get Specific “CallCenterAgent” Validation Error on Operation

Gets a specific validation error related to a “CallCenterAgent” task by its ID.

HTTP GET - */v1/operations/{operation-id}/callcenteragent/validationerrors/{validation-error-id}*

Path Variables

- **operation-id** - The ID of the operation to get “CallCenterAgent” validation errors for.
- **validation-error-id** - The ID of the validation error to retrieve.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
validationErrors	JSON List	List of String validation error messages that occurred for the task.
validationErrors[0]	String	An error message describing the validation error that has occurred for this task.

validationError.task	JSON Object	JSON object containing the task that the validation error occurred on.
----------------------	-------------	--

Response Body Example

```
200 OK
{
  "id": "77846af043714dd7a981427decfc71c1",
  "validationErrors": [
    "validation error message 1",
    "validation error message 2",
    ...
  ],
  "task": {
    "command": "Assign",
    "content": {
      {assign-call-center-agent-fields}
    }
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved validation error.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Delete “CallCenterAgent” Validation Error on Operation

Deletes a specific validation error related to a “CallCenterAgent” task from the operation, so that a new task may be appended to the operation which fixes the validation error.

HTTP DELETE - `/v1/operations/{operation-id}/callcenteragent/validationerrors/{validation-error-id}`

Path Variables

- **operation-id** - The ID of the operation to delete “CallCenterAgent” validation errors for.
- **validation-error-id** - The ID of the validation error to delete.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully deleted validation error.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

None.

Get All “CallRecording” Validation Errors on Operation

This endpoint supports File Download. See the ‘[API Workflow](#)’ section for more information.

Gets all validation errors on the operation related to “CallRecording” tasks.

HTTP GET - */v1/operations/{operation-id}/callrecording/validationerrors*

Path Variables

- **operation-id** - The ID of the operation to get “CallRecording” validation errors for.

Query Parameters

- **page_size** - The maximum number of items that can be displayed on a single page of results. Defaults to 50.
- **page_number** - The page number to be returned. Starts at 0, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	The maximum number of results that can be returned on the page.
pageNumber	Integer	The current page of results.
totalPages	Integer	The total number of pages of results

totalItems	Integer	The total number of results across all pages.
CallRecording	JSON List	JSON List of all Validation Errors that occurred in "CallRecording" tasks.
CallRecording[0]	JSON Object	JSON Object containing information about the Validation Error that has occurred, and the task that the validation error was found in.
CallRecording[0].id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
CallRecording[0].validationErrors	JSON List	List of String validation error messages for the task.
CallRecording[0].validationErrors[0]	String	An error message describing the validation error that has occurred for this task.
CallRecording[0].task	JSON Object	JSON object containing the task that the validation error occurred on.

Response Body Example

```

200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 5,
  "totalItems": 250,
  "CallRecording": [
    {
      "id": "77846af043714dd7a981427decfc71c1",
      "validationErrors": [
        "validation error message 1",
        "validation error message 2",
        ...
      ],
      "task": {
        "command": "Modify",
        "content": {
          {modify-call-recording-fields}
        }
      }
    },
    {
      "id": "77846af043714dd7a981427decfc71c1",
      "validationErrors": [
        "validation error message 1",

```

```

        "validation error message 2",
        ...
        ...
    ],
    "task": {
        "command": "Modify",
        "content": {
            {modify-call-recording-fields}
        }
    }
},
...
...
]
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved page of “CallRecording” validation errors.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Get Specific “CallRecording” Validation Error on Operation

Gets a specific validation error related to a “CallRecording” task by its ID.

HTTP GET - `/v1/operations/{operation-id}/callrecording/validationerrors/{validation-error-id}`

Path Variables

- **operation-id** - The ID of the operation to get “CallRecording” validation errors for.
- **validation-error-id** - The ID of the validation error to retrieve.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
id	String	Unique Identifier for the Validation Error, used to retrieve or delete this particular Validation Error
validationErrors	JSON List	List of String validation error messages that occurred for the task.
validationErrors[0]	String	An error message describing the validation error that has occurred for this task.
validationError.task	JSON Object	JSON object containing the task that the validation error occurred on.

Response Body Example

```
200 OK
{
  "id": "77846af043714dd7a981427decfc71c1",
  "validationErrors": [
    "validation error message 1",
    "validation error message 2",
    ...
  ],
  "task": {
    "command": "Modify",
    "content": {
      {modify-call-recording-fields}
    }
  }
}
```

Response Status Codes

Success

- 200 OK - Successfully retrieved validation error.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}

Delete “CallRecording” Validation Error on Operation

Deletes a specific validation error related to a “CallRecording” task from the operation, so that a new task may be appended to the operation which fixes the validation error.

HTTP DELETE - */v1/operations/{operation-id}/callrecording/validationerrors/{validation-error-id}*

Path Variables

- **operation-id** - The ID of the operation to delete “CallRecording” validation errors for.
- **validation-error-id** - The ID of the validation error to delete.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully deleted validation error.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID or Validation Error ID was not found.

Response Headers

None.

Delete Operation

Deletes a specified Operation and all tasks related to the Operation.

Please Note: If the Operation has been scheduled for processing by OpEasy, the Scheduled Operation must be deleted before deleting the Operation.

HTTP DELETE - */v1/operations/{operation-id}*

Path Variables

- **operation-id** - The ID of the operation to delete.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully Deleted Operation.

Error

- 400 Bad Request - A Scheduled Operation still exists in relation to this Operation.
- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

None.

SCHEDULED OPERATIONS ENDPOINTS

Add new Scheduled Operation

Schedules a particular Operation to be processed by OpEasy.

HTTP POST - */v1/scheduledoperations*

Path Variables

None.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json
- Content-Type: application/json

Request Body Fields

Field Name	Type	Description
operation	JSON Object	JSON Object containing the operation ID to schedule.
operation.id	String	ID of the existing Operation to schedule.

Request Body Example

```
{
  "operation": {
    "id": "7fc796c5fff1472caf1c3c6da8bc8421"
  }
}
```

Response Body Fields

Field Name	Type	Description
scheduledOperation	JSON Object	JSON object containing information about the newly-scheduled operation

scheduledOperation.id	String	String representing the ID of the newly-scheduled operation
scheduledOperation.status	String	Current status of the scheduled operation. Can be one of: <ul style="list-style-type: none"> • PENDING • PROCESSING • COMPLETED • COMPLETED_WITH_ERRORS
scheduledOperation.operation	JSON Object	JSON Object representing the operation that has been scheduled.

Response Body Example

```
202 ACCEPTED
{
  "scheduledOperation": {
    "id": "2f9afd363e5c11edb8780242ac120002",
    "status": "PENDING",
    "operation": {
      "id": "7fc796c5fff1472caf1c3c6da8bc8421"
    }
  }
}
```

Response Status Codes

Success

- 202 Accepted - Successfully scheduled operation.

Error

- 400 Bad Request - The Operation provided has unresolved validation errors and cannot be scheduled.
- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Operation ID provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}
- Location: {link-to-status-endpoint-for-scheduled-operation}

Get Status of Scheduled Operation

Retrieves the current status of the scheduled operation.

HTTP GET - */v1/scheduledoperations/{scheduled-operation-id}/status*

Path Variables

- **scheduled-operation-id** - The ID of the scheduled operation to get the status of.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
scheduledOperation	JSON Object	JSON object containing information about the newly-scheduled operation
scheduledOperation.id	String	String representing the ID of the newly-scheduled operation
scheduledOperation.status	String	Current status of the scheduled operation. Can be one of: <ul style="list-style-type: none"> • PENDING • PROCESSING • COMPLETED • COMPLETED_WITH_ERRORS

scheduledOperation.startTime	String	Timestamp for when the scheduled operation started processing
scheduledOperation.completedTime	String	If status is either COMPLETED or COMPLETED_WITH_ERRORS, shows a timestamp for when the scheduled operation completed.
scheduledOperation.links	JSON Object	If status is either COMPLETED or COMPLETED_WITH_ERRORS, contains links to view the results of the scheduled operation.
scheduledOperation.links.results	String	Link to view the results of the completed operation.
scheduledOperation.operation	JSON Object	JSON Object representing the operation that has been scheduled.

Response Body Example

202 ACCEPTED

```
{
  "scheduledOperation": {
    "id": "2f9afd363e5c11edb8780242ac120002",
    "status": "PROCESSING",
    "startTime": "2022-09-27T12:02:58.321+00:00",
    "operation": {
      "id": "7fc796c5fff1472caf1c3c6da8bc8421"
    }
  }
}
```

200 OK

```
{
  "scheduledOperation": {
    "id": "2f9afd363e5c11edb8780242ac120002",
    "status": "COMPLETED",
    "startTime": "2022-09-27T12:02:58.321+00:00",
    "completedTime": "2022-09-27T12:03:21.622+00:00",
    "links": {
      "results": "/v1/scheduledoperations/{scheduled-operation-id}/results"
    }
    "operation": {
      "id": "7fc796c5fff1472caf1c3c6da8bc8421"
    }
  }
}
```

Response Status Codes

Success

- 202 Accepted - Operation is still ongoing and has not completed yet.
- 200 OK - Operation is complete.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.

Response Headers

- Content-Type: application/json
- Content-Length: {length-of-response}
- Location: {link-to-results-endpoint-of-completed-operation} **(Only if Operation has Completed)**

View Results of Completed Scheduled Operation

Retrieves an overview of the results from the completed scheduled operation.

HTTP GET - */v1/scheduledoperations/{scheduled-operation-id}/results*

Path Variables

- **scheduled-operation-id** - The ID of the scheduled operation to retrieve results for.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
results	JSON Object	JSON Object containing results information about each type of task in the completed operation.
results.Users	JSON Object	JSON Object containing results information about the Users tasks in the completed operation.
results.Users.size	Integer	Total number of completed Users tasks in the operation.
results.Users.successful	Integer	Total number of successful Users tasks in the operation.
results.Users.failed	Integer	Total number of failed Users tasks in the operation.
results.Users.href	String	Link to detailed results for each Users task in the operation.
results.CallCenterAgent	JSON Object	JSON Object containing results information about the Call Center Agent tasks in the completed operation.
results.CallCenterAgent.size	Integer	Total number of completed Call Center Agent tasks in the operation.
results.CallCenterAgent.successful	Integer	Total number of successful Call Center Agent tasks in the operation.
results.CallCenterAgent.failed	Integer	Total number of failed Call Center Agent tasks in the operation.
results.CallCenterAgent.href	String	Link to detailed results for each Call Center Agent task in the operation.
results.CallRecording	JSON Object	JSON Object containing results information about the Call Recording tasks in the completed operation.
results.CallRecording.size	Integer	Total number of completed Call Recording tasks in the operation.
results.CallRecording.successful	Integer	Total number of successful Call Recording tasks in the operation.

results.CallRecording.failed	Integer	Total number of failed Call Recording tasks in the operation.
results.CallRecording.href	String	Link to detailed results for each Call Recording task in the operation.

Response Body Example

```

200 OK
{
  "results": {
    "Users": {
      "size": 50,
      "successful": 50,
      "failed": 0,
      "href": "/scheduledoperations/{scheduled-operation-id}/results/users"
    },
    "CallCenterAgent": {
      "size": 50,
      "successful": 50,
      "failed": 0,
      "href": "/scheduledoperations/{scheduled-operation-id}/results/callcenteragent"
    },
    "CallRecording": {
      "size": 50,
      "successful": 50,
      "failed": 0,
      "href": "/scheduledoperations/{scheduled-operation-id}/results/callrecording"
    }
  }
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved results for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.
- 404 Not Found - The Scheduled Operation has not completed yet, so no results are available.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

View Users-specific Results of Completed Scheduled Operation

This endpoint supports File Download. See the '[API Workflow](#)' section for more information.

Retrieves the results related to Users tasks on the specified completed scheduled operation.

HTTP GET - `/v1/scheduledoperations/{scheduled-operation-id}/results/users`

Path Variables

- **scheduled-operation-id** - The ID of the completed scheduled operation to retrieve Users results for.

Query Parameters

Parameter Name	Type	Description
pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages.
Users	JSON List	List of results related to User tasks.
Users[0]	JSON Object	JSON Object containing the result for this particular User task.
Users[0].command	String	The command that was executed for this task on the completed operation.
Users[0].status	String	Whether this task was successful or not. Can be either: <ul style="list-style-type: none"> • SUCCESS • FAILED
Users[0].errorCode	String	Numerical code indicating the type of error that occurred. (Only present if “status” is “FAILED”).
Users[0].errorDescription	String	Error message String detailing the error that occurred. (Only present if “status” is “FAILED”).
Users[0].content	JSON Object	JSON Object containing the fields that were provided in the original request.

Response Body Example

200 OK

```
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 10,
  "totalItems": 500,
  "Users": [
    {
      "command": "AddUserDevice",
```



```

    "status": "SUCCESS",
    "content": {
      {add-user-device-fields}
    }
  },
  {
    "command": "AddDevice",
    "status": "ERROR",
    "errorCode": "400",
    "errorDescription": "Device already exists",
    "content": {
      {add-user-device-fields}
    }
  },
  ...
  ...
]
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved results for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.
- 404 Not Found - The Scheduled Operation has not completed yet, so no results are available.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

View Call Center Agent-specific Results of Completed Scheduled Operation

This endpoint supports File Download. See the [‘API Workflow’](#) section for more information.

Retrieves the results related to Call Center Agent tasks on the specified completed scheduled operation.

HTTP GET - */v1/scheduledoperations/{scheduled-operation-id}/results/callcenteragent*

Path Variables

- **scheduled-operation-id** - The ID of the completed scheduled operation to retrieve Call Center Agent results for.

Query Parameters

Parameter Name	Type	Description
pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages.

CallCenterAgent	JSON List	List of results related to Call Center Agent tasks.
CallCenterAgent[0]	JSON Object	JSON Object containing the result for this particular Call Center Agent task.
CallCenterAgent[0].command	String	The command that was executed for this task on the completed operation.
CallCenterAgent[0].status	String	Whether this task was successful or not. Can be either: <ul style="list-style-type: none"> • SUCCESS • FAILED
CallCenterAgent[0].errorCode	String	Numerical code indicating the type of error that occurred. (Only present if “status” is “FAILED”).
CallCenterAgent[0].errorDescription	String	Error message String detailing the error that occurred. (Only present if “status” is “FAILED”).
CallCenterAgent[0].content	JSON Object	JSON Object containing the fields that were provided in the original request.

Response Body Example

```

200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 10,
  "totalItems": 500,
  "CallCenterAgent": [
    {
      "command": "Assign",
      "status": "FAILED",
      "errorCode": "400",
      "errorDescription": "User already assigned",
      "content": {
        {assign-call-center-agent-fields}
      }
    },
    {
      "command": "Remove",
      "status": "SUCCESS",
      "content": {
        {remove-call-center-agent-fields}
      }
    },
  ],
}

```

```

    ...
    ...
  ]
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved results for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.
- 404 Not Found - The Scheduled Operation has not completed yet, so no results are available.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

View Call Recording-specific Results of Completed Scheduled Operation

This endpoint supports File Download. See the '[API Workflow](#)' section for more information.

Retrieves the results related to Call Recording tasks on the specified completed scheduled operation.

HTTP GET - */v1/scheduledoperations/{scheduled-operation-id}/results/callrecording*

Path Variables

- **scheduled-operation-id** - The ID of the completed scheduled operation to retrieve Call Recording results for.

Query Parameters

Parameter Name	Type	Description

pageSize	Integer	Maximum number of items to display on a single page of results. If not present, defaults to 50.
pageNumber	Integer	The page number to return. If not present, defaults to the first page.

Required Headers

- Authorization: {authentication-token}
- Accept: application/json **OR** Accept: application/octet-stream

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

Field Name	Type	Description
pageSize	Integer	Pagination field displaying the total number of entries displayed on the page.
pageNumber	Integer	Pagination field displaying the current page number.
totalPages	Integer	Pagination field displaying the total number of pages of results.
totalItems	Integer	Pagination field displaying the total number of items across all pages.
CallRecording	JSON List	List of results related to Call Recording tasks.
CallRecording[0]	JSON Object	JSON Object containing the result for this particular Call Recording task.
CallRecording[0].command	String	The command that was executed for this task on the completed operation.

CallRecording[0].status	String	Whether this task was successful or not. Can be either: <ul style="list-style-type: none"> • SUCCESS • FAILED
CallRecording[0].errorCode	String	Numerical code indicating the type of error that occurred. (Only present if “status” is “FAILED”).
CallRecording[0].errorDescription	String	Error message String detailing the error that occurred. (Only present if “status” is “FAILED”).
CallRecording[0].content	JSON Object	JSON Object containing the fields that were provided in the original request.

Response Body Example

```

200 OK
{
  "pageSize": 50,
  "pageNumber": 1,
  "totalPages": 10,
  "totalItems": 500,
  "CallRecording": [
    {
      "command": "Modify",
      "status": "SUCCESS",
      "content": {
        {call-recording-modify-fields}
      }
    },
    {
      "command": "Modify",
      "status": "ERROR",
      "errorCode": "400",
      "errorDescription": "An error occurred",
      "content": {
        {call-recording-modify-fields}
      }
    },
    ...
    ...
  ]
}

```

Response Status Codes

Success

- 200 OK - Successfully retrieved results for operation.

Error

- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.
- 404 Not Found - The Scheduled Operation has not completed yet, so no results are available.

Response Headers

- Content-Type: application/json **OR** Content-Type: application/octet-stream
- Content-Length: {length-of-response}

Delete Scheduled Operation

Deletes a specified Scheduled Operation and all results relating to the Scheduled Operation.

Please Note: The Scheduled Operation can only be deleted if it is in a completed state (i.e. Status is COMPLETED or COMPLETED_WITH_ERRORS).

HTTP DELETE - */v1/scheduledoperations/{scheduled-operation-id}*

Path Variables

- **scheduled-operation-id** - The ID of the Scheduled Operation to delete.

Query Parameters

None.

Required Headers

- Authorization: {authentication-token}

Request Body Fields

None.

Request Body Example

None.

Response Body Fields

None.

Response Body Example

None.

Response Status Codes

Success

- 204 No Content - Successfully Deleted Scheduled Operation and all related Results.

Error

- 400 Bad Request - The Scheduled Operation is not in a completed state and so could not be deleted.
- 401 Unauthorized - An authentication error occurred.
- 404 Not Found - The Scheduled Operation ID provided was not found.

Response Headers

None.

Appendix I - “Users” Fields and Commands

Available Commands

- **AddUser** - Add a new user.
- **AddUserDevice** - Add a new user, add a new device, and assign the new device to the user.
- **ModifyUser** - Modify user information.
- **ModifyDevice** - Modify device information.
- **DeleteUser** - Delete the user.
- **DeleteDevice** - Delete the device.
- **DeleteUserAndDevices** - Delete the user and their associated devices.

Fields used in Users Commands

Fields

Field Name	Field Type	Description	Used in Commands
userProfile	String	OpEasy User Profile to create user with.	<ul style="list-style-type: none"> • AddUser • AddUserDevice
groupId	String	The Group ID the user and/or device resides in. Must match the Group ID of an existing group.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser • AddDevice • ModifyDevice
user	JSON Object	JSON Object containing information for the User to be created.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser • DeleteUser • DeleteUserAndDevices
user.userId	String	<p>Unique Identifier for the User.</p> <p>Format: email address style (address@domain), where:</p> <ul style="list-style-type: none"> • address must be at least 6 characters. • domain must be known by the system. 	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser • DeleteUser • DeleteUserAndDevices

Field Name	Field Type	Description	Used in Commands
user.department	String	The Department the User should belong to. Must match the name of an existing Department	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.lastName	String	User last name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.firstName	String	User first name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.clidLastName	String	User Calling Line ID last name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.clidLastName	String	User Calling Line ID last name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.clidFirstName	String	User Calling Line ID first name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.clidFirstName	String	User Calling Line ID first name. Up to 30 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.clidPhoneNumber	String	User Calling Line ID phone number. Up to 23 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.phoneNumber	String	<p>User Primary Phone Number. Up to 23 characters. E.164 format is supported.</p> <p>Phone Number must exist and be assigned to the Enterprise/Group.</p>	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.phoneNumberActivation	String	Activates/Deactivates the user's phone number for use. Field is ignored if Phone Number	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser

Field Name	Field Type	Description	Used in Commands
		<p>Activation is disabled in Clearspan.</p> <p>This can be one of the following values:</p> <ul style="list-style-type: none"> • Activate • Deactivate 	
user.extension	String	User Primary Extension. Can be up to 20 digits.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.userPassword	String	Password to set for this User. Password rules are defined on Clearspan.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.emailAddress	String	Email Address for the User. Up to 80 characters, where the address portion must be at least 6 characters, and the domain must be known by the system.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.accountId	String	Office Billing Account ID for the User. Set to "USE_ORG_ID" to use the Account ID of the group or enterprise.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.userBillingType	String	String representing the user billing type.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.billingBundle	String	Name of a Billing Bundle to assign to the User.	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser
user.userErlRecordName	String	<p>ERL Record Name for the User.</p> <p>Only required if the Device is an AudioCodes Media"Pack or Media 5.</p> <p>Up to 50 characters.</p> <p>Must follow format set out by the Emergency Gateway System.</p>	<ul style="list-style-type: none"> • AddUser • AddUserDevice • ModifyUser

Field Name	Field Type	Description	Used in Commands
user.automaticCallDestination	String	Automatic Call Target Address. Only required if the device is a Media 5 device.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.voicePortalPasscode	String	This should be digits only. Passcode security rules are defined on Clearspan.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.endpointType	String	The type of User Endpoint this User will be. Can be one of: <ul style="list-style-type: none"> DeviceUser TrunkUser 	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.networkServerSite	String	The Network Server Site.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.vmTranscription	Boolean	Enable/Disable Voicemail transcription (speech to text).	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.voicemailAccount	String	Related to Unified Messaging. Can be one of: <ul style="list-style-type: none"> NoNotification EmailNotification EmailDelivery Note: No value disables Unified Messaging voicemail for this User.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.mailServerPassword	String	Password for the Mail Server User ID. This field is ignored if the User Settings Password option is set to 'Automatic' in Clearspan.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.servicePacks	JSON List	List of Service Packs that should be assigned to the User.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.servicePacks[0]	String	Must match the name of an existing Service Pack.	<ul style="list-style-type: none"> AddUser AddUserDevice

Field Name	Field Type	Description	Used in Commands
			<ul style="list-style-type: none"> ModifyUser
user.commBarringAuthCode	String	This should be digits only, representing the authorization code.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.callPickupGroup	String	Must match the name of an existing Call Pickup Group.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.huntGroup	String	Must match the name of an existing Hunt Group.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.msTeamsXsiPlugin	Boolean	Whether to enable XSI Plugin capability in MS Teams for this User.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.sipAuthName	String	The SIP Authentication Name for the User. Can be up to 80 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.sipAuthPassword	String	The SIP Authentication Password for the User. Can be up to 20 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.networkClassOfService	String	Must match the name of an existing Network Class of Service.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.language	String	Optional. Must match a valid Language for the enterprise/group.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.timeZone	String	Optional. Must match a valid Time Zone for the enterprise/group.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.alternateUserIds	JSON List	Optional. List of alternative User IDs, or Alternate UserID/Description.	<ul style="list-style-type: none"> AddUser AddUserDevice

Field Name	Field Type	Description	Used in Commands
			<ul style="list-style-type: none"> ModifyUser
user.alternateUserIds[0]	String	<p>Can either be a User ID, or a User ID and description in format "userID/description".</p> <p>For example:</p> <ul style="list-style-type: none"> test@example.com OR test@example.com/test user description 	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.alias1	String	<p>Alias for the User. Can be up to 161 characters.</p> <p>Format is address@domain, where:</p> <ul style="list-style-type: none"> address must be at least 6 characters. domain must be known by the system. 	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.alias2	String	<p>Alias for the User. Can be up to 161 characters.</p> <p>Format is address@domain, where:</p> <ul style="list-style-type: none"> address must be at least 6 characters. domain must be known by the system. 	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.alias3	String	<p>Alias for the User. Can be up to 161 characters.</p> <p>Format is address@domain, where:</p> <ul style="list-style-type: none"> address must be at least 6 characters. domain must be known by the system. 	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser

Field Name	Field Type	Description	Used in Commands
user.title	String	User Title, can be up to 50 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.pagerNumber	String	User Pager Number. Must be digits only. Can be up to 17 digits.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.mobileNumber	String	User Mobile Number. Must be digits only. Can be up to 17 digits.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.addressLocation	String	Location portion of User Address. Can be up to 80 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.addressLine1	String	Line 1 of User Address. Can be up to 80 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.addressLine2	String	Line 2 of User Address. Can be up to 80 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.city	String	City portion of User Address. Can be up to 50 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.stateProvince	String	State/Province portion of User Address. Can be up to 50 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.zipPostalCode	String	Zip/Postal Code portion of User Address. Can be up to 50 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
user.country	String	Country portion of User Address. Can be up to 50 characters.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser

Field Name	Field Type	Description	Used in Commands
user.userPositionOnDevice	String	Enter a value for position of the user on the device. This field is used by AudioCodes devices, which are configured with Static Line/Port Ordering.	<ul style="list-style-type: none"> AddUser AddUserDevice ModifyUser
device	JSON Object	JSON object containing device information when adding a user with a device, or adding/modifying/deleting a device.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice DeleteDevice
device.name	String	Name of the device. This must be unique within the system. Up to 80 characters.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice DeleteDevice
device.level	String	The level of the device. e.g.: <ul style="list-style-type: none"> Enterprise Group 	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice DeleteDevice
device.type	String	The type of device. Must match the name of an existing device type.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.linePort	String	Line/Port address for the user on this device. Must be unique within the system. Up to 161 characters.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.template	String	The provisioning template to use for the device. Must match the name of an existing device template.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.templateLevel	String	The level where the device template resides, e.g.: <ul style="list-style-type: none"> Enterprise Group 	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.physicalLocation	String	Identifies the device's location, may be up to 1024 characters.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice

Field Name	Field Type	Description	Used in Commands
device.macAddress	String	The MAC Address for the Device. May be blank if the device type uses Device Management with device access credentials. Maximum of 12 characters.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.deviceSipContact	String	The SIP Contact Address to use for this Device.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.hostNameIpAddress	String	The Hostname/IP Address of the Device	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.accessUserName	String	Username used for access when configuration mode for the device is via Device Management using Device Credentials. Must be unique within the system.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.accessPassword	String	Password used for access when configuration mode for the device is via Device Management using Device Credentials.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.vlanId	String	Identifies a VLAN ID.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.erlRecordName	String	ERL record name for the Device. May be up to 50 characters. Must follow the format set out by the Emergency Gateway System.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.deviceBillingType	String	String representing the device billing type.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice

Field Name	Field Type	Description	Used in Commands
device.pingUserName	String	Ping Client Username. Up to 256 characters in length. Valid characters are a-z, 0-9, or special characters '='_-'/'}	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.pingUserPassword	String	Ping Client Password.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.description	String	Description of the device. Up to 80 characters.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info	JSON Object	Settings related to the Mitel DECT 112 Phone	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.handsetInfo	JSON List	List of IPEI numbers and associated Registration Codes of the DECT handset.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.handsetInfo[0]	JSON Object	Represents an IPEI Number and associated Registration Code of a DECT handset.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.handsetInfo[0].ipeiNumber	String	String representing the IPEI number.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.handsetInfo[0].registrationCode	String	String representing the Registration Code	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.repeaterIpeiNumber	JSON List	List of IPEI numbers of the DECT repeaters. Maximum of 3.	<ul style="list-style-type: none"> AddUserDevice AddDevice ModifyDevice
device.dect112Info.repeaterIpeiNumber[0]	String	String representing the IPEI number.	<ul style="list-style-type: none"> AddUserDevice AddDevice

			<ul style="list-style-type: none"> • ModifyDevice
device.audioCodesDeviceSettings	JSON Object	JSON object containing information about AudioCodes device Stand Alone Service (SAS).	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.audioCodesDeviceSettings.sasRegistrar	String	Value of the FQDN of the SAS Registrar.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.audioCodesDeviceSettings.sasRegistrarPort	Integer	Port associated with the SAS Registrar.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.audioCodesDeviceSettings.sasDefaultGateway	String	Value of the FQDN of the SAS Default Gateway.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.audioCodesDeviceSettings.sasDefaultGatewayPort	Integer	Port associated with the SAS Default Gateway.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.trunkUserInformation	JSON Object	JSON Object containing Trunk User information.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.trunkUserInformation.trunkGroup	String	If this is a trunk user, enter the trunk group to assign this user to.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.trunkUserInformation.trunkLinePort	String	If this is a trunk user, enter the user's LinePort number or SIP address, depending on the identity/device profile assigned to the selected trunk group.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.trunkUserInformation.trunkContact	String	If this is a trunk user, enter the contact address for the user.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice

device.trunkUserInformation.alternateTrunkId	String	If the terminating subscriber has an alternate trunk identity, then the Application Server uses this identity instead of the subscriber's DB to form the URI for the To header.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice
device.trunkUserInformation.enterpriseTrunk	String	The enterprise trunk to assign to this user.	<ul style="list-style-type: none"> • AddUserDevice • AddDevice • ModifyDevice

Example JSON

AddUser command when specifying a User Profile

```
{
  "command": "AddUser",
  "content": {
    "groupId": "group",
    "userProfile": "MS Teams",
    "user": {
      "userId": "john.doe@example.com",
      "department": "department",
      "lastName": "Doe",
      "firstName": "John",
      "clidLastName": "Ltd.",
      "clidFirstName": "JohnDoe",
      "clidPhoneNumber": "1234567890",
      "phoneNumberActivation": "Activate",
      "phoneNumber": "1234567890",
      "extension": "31",
      "msTeamsXsiPlugin": true,
      "userPassword": "MyUserPassw0rd!",
      "emailAddress": "john.doe@example.com",
      "accountId": "account-id"
    },
    "device": {
      "physicalLocation": "DALLAS TX"
    }
  }
}
```

AddUser command when NOT specifying a User Profile

```
{
  "command": "AddUser",
```

```

"content": {
  "groupId": "group-id",
  "userProfile": "MS Teams",
  "user": {
    "userId": "john.doe@example.com",
    "department": "department-1",
    "lastName": "Doe",
    "firstName": "John",
    "clidLastName": "Ltd.",
    "clidFirstName": "JohnDoe",
    "clidPhoneNumber": "1348572357",
    "phoneNumber": "1234567890",
    "phoneNumberActivation": "ACTIVATE",
    "extension": "31",
    "userPassword": "MyUserPassw0rd!",
    "emailAddress": "john.doe@example.com",
    "accountId": "USE_ORG_ID",
    "userBillingType": "user-billing-type",
    "billingBundle": "billing-bundle-id",
    "userErlRecordName": "erl-record-name",
    "automaticCallDestination": "automatic-call-destination",
    "voicePortalPasscode": "voice-portal-passcode",
    "endpointType": "DeviceUser",
    "networkServerSite": "network-server-site",
    "vmTranscription": false,
    "voicemailAccout": "EmailNotification",
    "mailServerPassword": "pa$$w0rd!",
    "servicePacks": [
      "service-pack-1",
      "service-pack-2"
    ],
    "commBarringAuthCode": "1234",
    "callPickupGroup": "call-pickup-group",
    "huntGroup": "hunt-group",
    "msTeamsXsiPlugin": true,
    "sipAuthName": "john.doe",
    "sipAuthPassword": "342342",
    "networkClassOfService": "network-class-of-service",
    "language": "English (US)",
    "timeZone": "UTC",
    "alternateUserIds": [
      "alt-user-id-1",
      "alt-user-id-2"
    ],
    "alias1": "alias-1",
    "alias2": "alias-2",
    "alias3": "alias-3",
    "title": "title",
    "pagerNumber": "1353456343",
    "mobileNumber": "134535256",
    "addressLocation": "location",
    "addressLine1": "line1",
    "addressLine2": "line2",
    "city": "city",
    "stateProvince": "state",
    "zipPostalCode": "zipcode",
    "country": "USA",
  }
}

```

```

        "userPositionOnDevice": "user-position-on-device"
    }
}

```

AddUserDevice command when specifying a User Profile

```

{
  "command": "AddUserDevice",
  "content": {
    "groupId": "group",
    "userProfile": "MS Teams",
    "user": {
      "userId": "john.doe@example.com",
      "department": "department",
      "lastName": "Doe",
      "firstName": "John",
      "clidLastName": "Ltd.",
      "clidFirstName": "JohnDoe",
      "clidPhoneNumber": "1234567890",
      "phoneNumberActivation": "Activate",
      "phoneNumber": "1234567890",
      "extension": "31",
      "msTeamsXsiPlugin": true,
      "userPassword": "MyUserPassw0rd!",
      "emailAddress": "john.doe@example.com",
      "accountId": "account-id"
    },
    "device": {
      "physicalLocation": "DALLAS TX"
    }
  }
}

```

AddUserDevice command when NOT specifying a User Profile

```

{
  "command": "AddUserDevice",
  "content": {
    "groupId": "group-id",
    "user": {
      "userId": "john.doe@example.com",
      "department": "department-1",
      "lastName": "Doe",
      "firstName": "John",
      "clidLastName": "Ltd.",
      "clidFirstName": "JohnDoe",
      "clidPhoneNumber": "1348572357",
      "phoneNumber": "1234567890",
      "phoneNumberActivation": "ACTIVATE",
      "extension": "31",
      "userPassword": "MyUserPassw0rd!",
      "emailAddress": "john.doe@example.com",
      "accountId": "USE_ORG_ID",
      "userBillingType": "user-billing-type",
    }
  }
}

```

```

"billingBundle": "billing-bundle-id",
"userErlRecordName": "erl-record-name",
"automaticCallDestination": "automatic-call-destination",
"voicePortalPasscode": "voice-portal-passcode",
"endpointType": "DeviceUser",
"networkServerSite": "network-server-site",
"vmTranscription": false,
"voicemailAccout": "EmailNotification",
"mailServerPassword": "pa$$w0rd!",
"servicePacks": [
  "service-pack-1",
  "service-pack-2"
],
"commBarringAuthCode": "1234",
"callPickupGroup": "call-pickup-group",
"huntGroup": "hunt-group",
"msTeamsXsiPlugin": true,
"sipAuthName": "john.doe",
"sipAuthPassword": "342342",
"networkClassOfService": "network-class-of-service",
"language": "English (US)",
"timeZone": "UTC",
"alternateUserIds": [
  "alt-user-id-1",
  "alt-user-id-2"
],
"alias1": "alias-1",
"alias2": "alias-2",
"alias3": "alias-3",
"title": "title",
"pagerNumber": "1353456343",
"mobileNumber": "134535256",
"addressLocation": "location",
"addressLine1": "line1",
"addressLine2": "line2",
"city": "city",
"stateProvince": "state",
"zipPostalCode": "zipcode",
"country": "USA",
"userPositionOnDevice": "user-position-on-device"
},
"device": {
  "name": "my-device-name",
  "level": "group",
  "type": "device-type",
  "linePort": "3364346263.primary",
  "template": "my-device-template",
  "templateLevel": "group",
  "physicalLocation": "PLANO TX",
  "vlanId": "vlan-id",
  "erlRecordName": "device-erl-record-name",
  "deviceBillingType": "device-billing-type",
  "pingUserName": "john.doe",
  "pingPassword": "passw0rd!",
  "macAddress": "mac-address",
  "deviceSipContact": "sip-contact",
  "hostNameIpAddress": "hostname-ip-address",

```

```

"accessUserName": "john.doe",
"accessPassword": "passw0rd!",
"description": "device-description",
"dect112Info": {
  "handsetInfo": [
    {
      "ipeiNumber": "ipei-number-1",
      "registrationCode": "registration-code-1"
    },
    {
      "ipeiNumber": "ipei-number-2",
      "registrationCode": "registration-code-2"
    }
  ],
  "repeaterIpeiNumber": [
    "ipei-number"
  ]
},
"audioCodesDeviceSettings": {
  "SasRegistrar": "sas-registrar",
  "SasRegistrarPort": 5060,
  "SasDefaultGateway": "sas-default-gateway",
  "SasDefaultGatewayPort": 5090
},
"trunkUserInformation": {
  "trunkGroup": "trunk-group",
  "trunkLinePort": "1234567890.primary",
  "trunkContact": "trunk-contact",
  "alternateTrunkId": "alternate-trunk-id",
  "enterpriseTrunk": "enterprise-trunk"
}
}
}
}
}

```

ModifyUser command to modify a singular field on a User

```

{
  "command": "ModifyUser",
  "content": {
    "user": {
      "userId": "john.doe@example.com",
      "phoneNumber": "1234567891"
    }
  }
}

```

ModifyDevice command to modify a singular field on a Device

```

{
  "command": "ModifyDevice",
  "content": {
    "device": {
      "name": "my-device-name",
      "erlRecordName": "updated-erl-record-name"
    }
  }
}

```



```

    }
  }
}

```

DeleteUser command to delete a User without deleting their associated Devices

```

{
  "command": "DeleteUser",
  "content": {
    "user": {
      "userId": "john.doe@example.com"
    }
  }
}

```

DeleteUserAndDevices command to delete a User and all of their associated Devices

```

{
  "command": "DeleteUserAndDevices",
  "content": {
    "user": {
      "userId": "john.doe@example.com"
    }
  }
}

```

DeleteDevice command to delete a particular Device

```

{
  "command": "DeleteDevice",
  "content": {
    "device": {
      "name": "my-device-name",
    }
  }
}

```

Appendix II - “CallCenterAgent” Fields and Commands

Available Commands

- **Assign** - Assign an agent to one or more Call Centers.
- **Modify** - Modify the settings for an agent. Also assign supervisors to agent.
- **Remove** - Remove an agent from one or more Call Centers.

Fields used in CallCenterAgent Commands

Fields

Field Name	Type	Description	Used in Commands
agentId	String	ID of the Call Center Agent to be manipulated.	<ul style="list-style-type: none"> • Assign • Modify • Remove
callCenterInfo	JSON List	List of JSON objects representing call centers the agent should be assigned/unassigned from, or call centers where the agent should be modified on.	<ul style="list-style-type: none"> • Assign • Modify • Remove
callCenterInfo[0]	JSON Object	JSON object representing a Call Center the agent should be assigned, unassigned, or modified on.	<ul style="list-style-type: none"> • Assign • Modify • Remove
callCenterInfo[0].callCenterId	String	ID of the Call Center associated with this agent.	<ul style="list-style-type: none"> • Assign • Modify • Remove
callCenterInfo[0].join	Boolean	Whether the agent is automatically joined to the Call Center.	<ul style="list-style-type: none"> • Assign • Modify
callCenterInfo[0].skillLevel	Integer	Used in Premium call centers only. Integer value 1-20.	<ul style="list-style-type: none"> • Assign • Modify
callCenterInfo[0].supervisors	JSON List	List of Supervisor IDs assigned to this Agent.	<ul style="list-style-type: none"> • Assign • Modify
callCenterInfo[0].supervisors[0]	String	Supervisor ID to be assigned to this Agent.	<ul style="list-style-type: none"> • Assign • Modify

Example JSON

Assign command assigning a User to two different Call Centers

```
{
  "command": "Assign",
  "content": {
    "agentId": "john.doe@example.com",
    "callCenterInfo": [
      {
        "callCenterId": "call-center-1-id",
        "join": false,
        "skillLevel": 20,
        "supervisors": [
          "jane.doe@example.com"
        ]
      },
      {
        "callCenterId": "call-center-2-id",
        "join": false,
        "skillLevel": 20,
        "supervisors": [
          "jane.doe@example.com"
        ]
      }
    ]
  }
}
```

Modify command modifying configuration for a User on one Call Center they are assigned to

```
{
  "command": "Modify",
  "content": {
    "agentId": "john.doe@example.com",
    "callCenterInfo": [
      {
        "callCenterId": "call-center-1-id",
        "join": true
      }
    ]
  }
}
```

Modify command modifying configuration for a User on multiple Call Centers they are assigned to

```
{
  "command": "Modify",
  "content": {
    "agentId": "john.doe@example.com",
    "callCenterInfo": [
      {
```

```
        "callCenterId": "call-center-1-id",
        "join": true
    },
    {
        "callCenterId": "call-center-2-id",
        "join": true
    }
]
}
}
```

Remove command removing a User from the Call Centers they are assigned to

```
{
  "command": "Remove",
  "content": {
    "agentId": "john.doe@example.com",
    "callCenterInfo": [
      {
        "callCenterId": "call-center-1-id"
      },
      {
        "callCenterId": "call-center-2-id"
      }
    ]
  }
}
```

Appendix III - “CallRecording” Fields and Commands

Available Commands

- **Modify** - Modify Call Recording settings for the user.

Fields used in CallRecording Commands

Fields

Field Name	Type	Description	Used in Commands
userId	String	ID of the user to modify call recording configuration for.	• Modify
callRecording	JSON Object	JSON Object containing call recording information.	• Modify
callRecording.recordCall	String	Sets when and how the user's calls are recorded. Can be one of: <ul style="list-style-type: none"> • Never • Always • AlwaysWithPauseResume • OnDemand • OnDemandWithUserInitiated Start 	• Modify
callRecording.recordStartStopAnnouncement	Boolean	Whether to play an announcement when call recording is started or stopped	• Modify
callRecording.recordVoiceMessaging	Boolean	Whether to record calls that go to Voice Mail.	• Modify
callRecording.pauseResumeNotification	String	Whether to play a notification when call recording is paused or resumed. Can be one of: <ul style="list-style-type: none"> • None • Beep • PlayAnnouncement 	• Modify

callRecording.repeatRecordCallWarningTone	Boolean	Whether to repeat a periodic tone to the caller, to indicate that the call is being recorded	<ul style="list-style-type: none"> • Modify
callRecording.repeatRecordCallWarningToneSeconds	Integer	Configures the time between periodic warning tones when "repeatRecordCallWarningTone" is set to True. Integer value between 10 to 1800 seconds.	<ul style="list-style-type: none"> • Modify

Example JSON

Modify command, all fields are provided to completely overwrite Call Recording configuration

```
{
  "userId": "user-id",
  "callRecording": {
    "recordCall": "Always",
    "recordStartStopAnnouncement": False,
    "recordVoiceMessaging": False,
    "pauseResumeNotification": "Beep",
    "repeatRecordCallWarningTone": True,
    "repeatRecordCallWarningToneSeconds": 10
  }
}
```

Modify command, where only the User ID and the field to be modified are provided

```
{
  "userId": "user-id",
  "callRecording": {
    "recordStartStopAnnouncement": true
  }
}
```

Appendix IV - API Error Response Fields and Examples

Please Note: The error responses outlined in this section do not apply to the “Create New Operation” request.

When validation errors occur on the “Create New Operation” request, they are added to the created Operation as Validation Errors that must be resolved prior to scheduling.

Please see the ‘[API Workflow](#)’ section for more information on this.

When an error occurs on the OpEasy Provisioning API, an appropriate error response is returned, along with a response body detailing the error that occurred.

There are two types of error returned by the OpEasy Provisioning API:

- **Validation Errors** - Errors caused by the value of a particular field provided in the body of the original request.
- **General Errors** - Errors not caused by a particular field’s value (all other errors).

Fields Used in Error Responses

Validation Error - Fields

Field Name	Type	Description
errorCode	String	HTTP Status code relating to the error. This is always 400 on a Validation Error.
message	String	A message describing the error that occurred.
validationError	JSON Object	JSON Object containing more details about the particular validation error that occurred.
validationError.fieldName	String	The field name in the original request that caused the validation error to occur.
validationError.message	String	A detailed error message describing the issue that occurred and why it caused an error.
validationError.originalInput	String	The input from the original request that caused the error.

Validation Error - Example JSON

```
{
  "errorCode": "400",
  "message": "url field must be a valid URL with a 'https://...' scheme",
  "validationError": {
    "fieldName": "url",
    "message": "url field must be a valid URL with a 'https://...' scheme",
    "originalInput": "http://example.com"
  }
}
```

}

General Error - Fields

Field Name	Type	Description
errorCode	String	HTTP Status code relating to the error that occurred.
message	String	A high-level message describing the error that occurred.
generalError	JSON Object	JSON Object containing more details about the particular error that occurred.
generalError.message	String	A detailed error message describing the issue that occurred and why it caused an error.
generalError.originalInput	String	The input from the original request that caused the error. Only present if this is an error caused by a particular input.

General Error - Example JSON

```
{
  "errorCode": "404",
  "message": "Operation not found",
  "generalError": {
    "message": "Operation with ID=806f8a6f456a4e02b6cc4379419e28b1 could not be
found",
    "originalInput": "806f8a6f456a4e02b6cc4379419e28b1"
  }
}
{
  "errorCode": "503",
  "message": "Service Unavailable",
  "generalError": {
    "message": "The OpEasy Provisioning API service is currently unavailable.
Please try again later"
  }
}
```

General Error Codes and Descriptions

- 100 "General Error"
- 101 "User does not exist"
- 102 "User already exists"
- 103 "Device does not exist"
- 104 "Device already exists"
- 105 "Call Center does not exist or agent cannot be assigned to call center." *For this error, the Id of the call center in question is included at the end of the description enclosed in brackets [callCenter1@test.com]*
- 106 "Validation Error"

- 107 "User is already assigned to Call Center(s) in the list." *For this error, the Ids of the list of call centers in question are included at the end of the description enclosed in brackets [callCenter1 @test.com, callCenter2 @test.com]*
 - 401 "Unauthorized"
 - 500 "System Error"
-

