

Arena

EMPOWER API DEVELOPER'S GUIDE

Version 1.20

Released on September 24, 2021

Restricted Rights

No part of this document may be reproduced, distributed or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, without the express written permission of Arena, A PTC Business.

The material in this manual is for information only and is subject to change without notice. While reasonable efforts have been made to ensure accuracy of this material, Arena, A PTC Business, does not assume any liability resulting from errors or omissions in this manual, or from the use of the information in this manual.

Copyrights & Trademarks

Copyright © 2003-2021, Arena, A PTC Business. All rights reserved.

Arena and Arena PLM are trademarks of Arena, A PTC Business. All other company and product names may be trademarks of their respective owners and are used for product and company identification only.

Table of Contents

| | |
|-------------------------|----------|
| Change Log | 8 |
|-------------------------|----------|

Theory of Operation

| | |
|---|-----------|
| Overview | 9 |
| API Format | 10 |
| Connecting and Permissions | 11 |
| API Requests | 12 |
| Responses | 13 |
| Successes and Errors | 15 |
| API Sample Code | 16 |

Empower API Endpoints

| | |
|---|------------|
| POST Log In | 18 |
| PUT Log Out | 20 |
| GET Items (Search) | 21 |
| GET Item General | 27 |
| GET Item Business Units | 29 |
| GET Item Projects | 31 |
| GET Item Substitute Parts | 33 |
| GET Item Attributes | 35 |
| GET Item Documents | 37 |
| GET Item Documents Content | 39 |
| GET Item Vendors | 41 |
| GET Item Service Objects | 43 |
| GET Item Email History | 45 |
| GET Item Viewing History | 47 |
| GET Item Change History | 144 |
| GET Item Training | 54 |
| POST Item Document Upload | 56 |
| PUT Item Update General | 58 |
| PUT Item Update Attributes | 60 |
| GET Item BOM | 62 |
| GET Item BOM Configurations | 69 |
| GET Item Configured BOM | 72 |
| GET BOM Routing GUID | 77 |
| GET Item Routing Operations | 79 |
| GET Item Routing Sequences | 82 |
| GET Item Routing BOM Items | 84 |
| GET Item Routing Operation Documents | 86 |
| GET Routing Operation Document Content | 88 |
| GET Item Revisions | 90 |
| GET Item Changes | 92 |

| | |
|---|------------|
| GET Item Quality | 94 |
| GET Item Comments | 96 |
| GET Item Associations | 98 |
| GET Where Associated | 100 |
| GET Where Used | 102 |
| GET Where Used As Alternate | 106 |
| GET Where Pending Operations | 108 |
| GET Changes (Search) | 110 |
| GET Change/ECO General | 116 |
| GET Change/ECO Attributes | 118 |
| GET Change/ECO Business Units | 120 |
| GET Change/ECO Projects | 122 |
| GET Change/ECO Affected Items | 124 |
| GET Change/ECO Documents | 126 |
| GET Change Documents Content | 128 |
| GET Change/ECO Tasks | 130 |
| GET Change/ECO Comments | 134 |
| GET Change/ECO Associations | 136 |
| GET Change Where Associated | 138 |
| GET Change Email History | 140 |
| GET Change View History | 142 |
| GET Change History | 144 |
| GET Change Training | 146 |
| POST Change Document Upload | 148 |
| PUT Change Update General | 150 |
| PUT Change Update Attributes | 152 |
| GET Change/ECO General Changes | 154 |
| GET Change/ECO Attributes Changes | 157 |
| GET Change/ECO BOM Changes | 159 |
| GET Change/ECO Routing Changes | 162 |
| GET Change/ECO Service Changes | 165 |
| GET Change/ECO Vendor Item Changes | 167 |
| GET Quality (Search) | 169 |
| GET Quality General | 174 |
| POST Quality/CAPA Object Creation | 177 |
| POST Adding Affected Objects to a Quality/CAPA | 181 |
| GET Quality Attributes | 184 |
| GET Quality Business Units | 186 |
| GET Quality Projects | 188 |
| GET Quality Affected Items | 190 |
| GET Quality Tasks | 192 |
| GET Quality Documents | 195 |
| GET Quality Documents Content | 197 |
| GET Quality Roles | 199 |
| GET Quality Comments | 201 |
| GET Quality Associations | 203 |

| | |
|--|------------|
| GET Quality Where Associated | 205 |
| GET Quality Email History | 207 |
| GET Quality View History | 209 |
| GET Quality Change History | 211 |
| GET Quality Training | 213 |
| POST Quality Document Upload | 215 |
| PUT Quality Update General | 217 |
| PUT Quality Update Attributes | 220 |
| GET Projects (Search) | 222 |
| GET Projects General | 227 |
| GET Projects Attributes | 229 |
| GET Projects Business Units | 231 |
| GET Projects Summary | 233 |
| GET Projects Tasks | 235 |
| GET Projects Roles | 238 |
| GET Projects Documents | 240 |
| GET Project Document Content | 242 |
| GET Projects Comments | 244 |
| GET Project Assignments | 246 |
| GET Projects References | 248 |
| GET Project Email History | 250 |
| GET Project View History | 252 |
| GET Projects Change History | 254 |
| GET Projects Trainings | 256 |
| POST Project Document Upload | 258 |
| PUT Project Update General | 260 |
| PUT Project Update Attributes | 262 |
| GET Vendor Items (Search) | 264 |
| GET Vendor Items General | 268 |
| GET Vendor Items Attributes | 270 |
| GET Vendor Items Documents | 273 |
| GET Vendor Items Document Content | 275 |
| GET Vendor Items Supplier Items | 277 |
| GET Vendor Items Comments | 279 |
| GET Vendor Items Where Used | 281 |
| GET Vendor Items Changes | 283 |
| GET Vendor Items Quality | 285 |
| GET Vendor Items Associations | 287 |
| GET Vendor Items Where Associated | 289 |
| GET Vendor Items Change History | 291 |
| GET Vendor Items Viewing History | 293 |
| GET Vendor Items Email History | 295 |
| POST Vendor Items Document Upload | 297 |
| PUT Vendor Item Update General | 299 |
| PUT Vendor Item Update Attributes | 301 |
| GET Vendors (Search) | 304 |

| | |
|---|------------|
| GET Vendors General | 309 |
| GET Vendors Attributes | 311 |
| GET Vendors Documents | 313 |
| GET Vendor Document Content | 315 |
| GET Vendor Contacts | 317 |
| GET Vendors Vendor Items | 319 |
| GET Vendors Where Used By Items | 321 |
| GET Vendors Where Used By Supplier Items | 323 |
| GET Vendors Quality | 325 |
| GET Vendors Associations | 327 |
| GET Vendors Where Associated | 329 |
| GET Vendor Change History | 331 |
| GET Vendor Viewing History | 333 |
| GET Vendor Email History | 335 |
| POST Vendor Document Upload | 337 |
| PUT Vendor Update General | 339 |
| PUT Vendor Update Attributes | 341 |
| GET Service Objects (Search) | 343 |
| GET Service Objects General | 347 |
| GET Service Objects Attributes | 349 |
| GET Service Objects Documents | 351 |
| GET Service Object Document Content | 353 |
| GET Service Objects Where Used | 355 |
| GET Service Objects Quality | 357 |
| GET Service Object Service Objects | 359 |
| GET Service Objects Associations | 361 |
| GET Service Objects Where Associated | 363 |
| GET Service Object Email History | 365 |
| GET Service Objects Viewing History | 367 |
| GET Service Object Change History | 369 |
| GET Service Objects Training | 371 |
| POST Service Object Document Upload | 373 |
| PUT Service Objects Update General | 375 |
| PUT Service Objects Update Attributes | 377 |
| GET Training (Search) | 379 |
| GET Trainings General | 384 |
| GET Trainings Users | 386 |
| GET Trainings Items | 388 |
| GET Trainings Revisions Items | 390 |
| GET Training Tasks | 392 |
| GET Training Attributes | 395 |
| GET Trainings Documents | 397 |
| GET Training Document Content | 399 |
| GET Trainings Revisions | 401 |
| GET Training Email History | 403 |
| GET Trainings Viewing History | 405 |

| | |
|---|------------|
| GET Training Change History | 407 |
| GET Training Associations | 410 |
| GET Training Where Associated | 412 |
| POST Training Document Upload | 414 |
| PUT Training Update General | 416 |
| PUT Training Update Attributes | 418 |
| GET HelpDesk Ticket (Search) | 421 |
| GET Tickets General | 425 |
| GET Tickets Attributes | 427 |
| GET Tickets Comments | 429 |
| GET Tickets Documents | 432 |
| GET HelpDesk Ticket Document Content | 434 |
| GET Tickets Associations | 436 |
| GET Tickets Where Associated | 438 |
| GET Tickets Change History | 440 |
| GET Tickets Viewing History | 442 |
| POST HelpDesk Ticket Document Upload | 444 |
| PUT Tickets Update General | 446 |
| PUT Ticket Update Attributes | 448 |
| GET HelpDesk Post (Search) | 450 |
| GET HelpDesk Post General | 454 |
| GET HelpDesk Post Comments | 456 |
| GET HelpDesk Post Documents | 459 |
| GET HelpDesk Post Document Content | 461 |
| GET HelpDesk Posts Associations | 463 |
| GET HelpDesk Post Where Associated | 465 |
| GET HelpDesk Posts Change History | 467 |
| GET HelpDesk Post Viewing History | 469 |
| POST HelpDesk Post Document Upload | 471 |
| PUT HelpDesk Posts Update General | 473 |
| GET Users Info | 475 |
| GET User Info | 477 |
| GET Settings Item Types | 479 |
| GET Settings Item Categories | 481 |
| GET Settings Item Lifecycles | 483 |
| GET Settings Change Types | 485 |
| GET Settings Project Types | 487 |
| GET Settings Vendor Types | 489 |
| GET Settings Vendor Status | 491 |
| GET Settings Quality Types | 493 |
| GET Settings Vendor Item Status | 495 |
| GET Settings Service Object Types | 497 |
| GET Settings Training Types | 499 |
| GET Settings Training Status | 501 |
| GET BOM Configuration Types | 503 |
| GET HelpDesk Post Types | 505 |

| | |
|---|------------|
| GET HelpDesk Post Categories | 507 |
| GET HelpDesk Ticket Types | 509 |
| GET HelpDesk Ticket Categories | 511 |
| GET HelpDesk Ticket Statuses | 513 |

Change Log

| Date | Updates |
|--------------------|--|
| September 24, 2021 | <p>The POST Login endpoint documentation now includes support of LDAP authentication through the new attribute Method.</p> <p>Added documentation for the following calls: POST Quality/CAPA Object Creation, POST Quality/CAPA Add Affected Objects, GET Users, and GET BOM Routing GUID.</p> <p>Empower API now supports API call limits. See the API Requests page for more information on API call limits and the response headers you can use to track them.</p> <p>Connecting and Permissions article has been updated to indicate that an API License is now required to use Empower API.</p> |
| May 5, 2021 | <p>Added documentation for the following calls: GET Change Where Associated, GET Change Email History, GET Change Viewing History, GET Change History, GET Changes Trainings, GET Project References, GET Vendor Contacts, GET Training Associations, GET Training Where Associated, and GET Tickets Where Associated.</p> |
| April 19, 2021 | <p>Preview Guide Released. Contains a brief description of the theory of operation and a list of supported endpoints with examples. The eventual full guide will contain a section were all object fields are defined. All modifcaitons will be tracked in this log.</p> |

Theory of Operation

Overview

The Empower REST API (Application Programming Interface) allows you to programmatically exchange data with your workspaces. This documentation includes details about requests and responses from Empower servers, and instructs developers in how to construct requests. This documentation assumes some familiarity with APIs in general.

API Format

The Empower API is based on a REST architecture and transfers JSON content exclusively (except for file content operations, which are JSON and multipart/form-data.)

The base URL is `https://<the Root URL of your Empower Installation>/restapi`.

For example, a request to return all Items in a workspace would be

```
https://<the Root URL of your Empower Installation>/restapi/items.
```

The user constructs JSON requests to specific URL endpoints on the Empower API service. The API service responds with data, in the case of a GET request, or updates Empower objects in the case of a POST request. You can also perform PUT requests to specific URLs.

This document includes details about requests and responses from Empower servers, and instructs developers in how to construct requests. This document assumes some familiarity with APIs in general.

A Note on JSON inputs: When constructing Requests to the API service, please follow best practices for JSON data types:

- Text values should be in quotes ("text")
- Numeric values should not be in quotes (42)
- Internal quotes in values should be escaped with the \ character (18").
- Dates: All search values in Empower API are strings and should match the value as it appears within the Empower database.
- GUID values should be in quotes ("2K4N1Y24FWFN6LDUC67B")

Each Empower object is represented by a GUID (Globally Unique Identifier). When you perform a GET, you receive object GUIDs in return, and use those GUIDs to specify objects on which you perform actions.

So, you might perform a GET to determine the GUID of a particular Item, and then perform a PUT specifying that Item's GUID to update its specification data.

Empower's approach to a REST API distinguishes between two types of entities: an object itself (such as an item or file) and the relationship between two objects (such as a BOM line or file association.) This approach allows users to specify attributes both for the object and for the relationship.

For example, the attributes of an item might include, name, number, etc—but when that item is being added to a BOM, you need to specify attributes about the relationship between the item and its parent (which might include quantity, reference designators, etc.)

For URL Search attributes, all Data and Time requests are in strings and should match the date format as it appears within the Empower Database Search.

For Responses, Date and Time formats in the Empower REST API are in the following format: "2021-09-09 17:30:00" yyyy-MM-dd HH-mm-ss (yyyy is 4 digit year, MM is two digit month, dd is two digit day, HH is 2 digit 24 hr hour, mm is 2 digit minute, ss is 2 digit second).

Connecting and Permissions

An Empower API license for your Empower instance is required to use Empower API. Connect to the Empower API service by providing your Empower login credentials (username and password or username and access key) in a [Log In](#) request. The API service returns an access token which must be included in the header of all subsequent requests for the session. A session will timeout 24 hours after the last action and the token will thereafter be invalid.

Recommended best practices for connecting to the Empower API:

- Use a dedicated user to access the Empower API. And more broadly, use a dedicated user for each integration connected to your Empower desktop.
- Log in to the API, perform whatever actions you desire, then log out of the API when you are done.

API Requests

The Empower REST API provides methods for accessing a resource, such as an Item or a category of Item, at a canonical URL. You can then perform an action upon that resource by specifying an endpoint URL, such as

```
https://<the Root URL of your Empower
Installation>/restapi//items/<item_GUID>/revisions
```

which returns all revisions for a given Item resource.

The header of all requests must include:

- an Authorization declaration for user authentication (except Log In, which grants a token)
- a content type declaration ("application/json", except for file POST endpoints with content, where the file metadata is JSON and the file payload itself is "multipart/form-data")
- an HTTP method declaration (GET, POST, PUT, DELETE)

Requests must be sent uncompressed. Responses may be returned uncompressed or compressed using gzip encoding.

Your Empower may have a daily limit on API calls. Any attempt to make additional calls past the API Limit results in an error message.

The POST Log In and POST Log Out calls are exempt from the call limit rule.

The following response header information can be used to track the remaining number of calls for the day if your Empower instance has a daily call limit.

For the POST Log In and PST Log Out endpoints, the response headers will not be included.

| New Response Headers When API Limit is Enabled | Description |
|--|---|
| X-Empower-Requests-Remaining | Indicates the number of remaining calls that can be made for the rest of the day. |
| X-Empower-Request-Limit | Indicates the total number of requests that can be made in a 24 hour time period. |
| X-Empower-Next-Request-Limit-Reset | Indicates the time the number of calls reset to the maximum daily call limit. |

Responses

For calls that return responses (and not arbitrary binary data), responses will look roughly like:

```
{
  "<object_field>": "<field_value>"
  ...
}
```

When the request returns multiple objects, responses look generally like:

```
{
  "Count": 20,
  "Results": [
    {
      "<object_field>": "<field_value>"
    },
    ...
  ]
}
```

When a request returns one or more errors:

```
{
  "Errors": [
    {
      "Code": <error_code>,
      "message": "<error_message>"
    }
  ],
}
```

To make responses more human-readable, the first level shows all core attributes. Second-level objects are shown in a compact version. In the Get Item BOM response example shown below, the second-level objects "Item" and includes only the "Guid".

```
{
  "Count": 16,
  "Results": [
    {
      "Guid": "185V00009G0000004",
      "Item": {
        "Guid": "100000000F00000JT"
      },
      "ItemNumber": 1,
      "Qty": "1",
      "UOM": "ea",
      "FindNumber": "1",
      "Refdes": "LB1",
      "Alternates": "",
      "Notes": "",
      "Special": "",
      "CustomFields": [
        {
          "Name": "Scrap Percentage (%)",

```

```
        "Value": ""
      },
      {
        "Name": "ERP Flag",
        "Value": ""
      },
      {
        "Name": "Dock Date",
        "Value": ""
      },
      {
        "Name": "Manufacturing Origin",
        "Value": ""
      },
      {
        "Name": "BOM Notes",
        "Value": ""
      }
    ]
  },
  ...
]
```

Successes and Errors

As much as possible, Empower attempts to use appropriate HTTP status codes to indicate the general class of problem, and this status code is repeated in the response. The following two tables give supported success status codes and their meanings, and supported error status codes and their meanings.

| Success Code | Meaning |
|--------------|--------------------------------|
| 200 OK | default success message |
| 201 Created | success and new entity created |

| Error Code | Meaning |
|----------------------------|--|
| 400 Bad request | returned if there is a syntax error in the request |
| 401 Unauthorized | returned if the requests require valid access token, but no valid access token is specified in http headers also returned if the login fails due to incorrect username or password or if due to timeout. |
| 403 Resource not found | returned if the user doesn't have the permission to access the requested data or perform the requested operation. |
| 404 Resource not found | returned if the endpoint of a request is not supported or if the requested resource does not exist. |
| 415 Unsupported media type | returned if the content-type within the body is not application/json. |

API Sample Code

You can download a set of API sample requests, along with instructions for installation, from [the Downloads page](#) in Empower.

Empower API Endpoints

POST Log In

/login

This logs a valid user into the Empower System and once the authentication is successful, a JSON response with an access token is returned. Users can log in with a user name and password. The token needs to be set in the headers of all subsequent requests for them to be processed successfully. The API client should add an HTTP header with name "Authorization".

To log in via LDAP authentication, add the attribute *Method* with a value of LDAP to your request body as in the third example.

Note: The access token will timeout and expire after 24 hours of inactivity.

Request Header

| Name | Value | Description |
|--------------|------------------|-------------|
| content-type | application/json | |

Sample Request Body - Password

```
{
  "Username": "bmcclintock",
  "password": "xxxxxxxxxx"
}
```

Sample Request Body - LDAP

```
{
  "Username": "dfernandez",
  "password": "xxxxxxxxxxxxxxxx",
  "Method": "LDAP"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|--------------|------------------|------------------------------|
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |

| Name | Value | Description |
|--------|------------------------|---|
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

/login

```
{
  "AccessToken":
  "My0FF2AqtLzuhkWSxsN0QfjddVcyGIMQcWp+A7JqATRkrGbeeCZsClxJHmS+NF0hKO49JMxWI6kRA7cH0+zCYg=="
}
```

Request with bad a password.

```
{
  "Errors": [
    {
      "code": 2000,
      "message": "Invalid password"
    }
  ]
}
```

Request with an invalid user.

```
{
  "Errors": [
    {
      "code": 2000,
      "message": "Invalid user"
    }
  ]
}
```

PUT Log Out

/logout

This invalidates the access token. Once this is processed successfully, the user cannot use this token to perform any further actions.

Headers

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 401 | Failure |

Response Header

| Name | Value | Description |
|--------------|------------------------|---|
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

/logout

no JSON response

GET Items (Search)

/items

Returns a collection of Item objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|----------------------------|--------|---|
| Part Number | string | The Part Number of the Item. |
| Description | string | The Part Description. |
| Type | string | The Part Type. |
| Category | string | The Category of the Part. |
| Lifecycle | string | The current lifecycle of the Part. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| Project | string | Projects associated with the Part. |
| Business Unit | string | Business Units associated with the Part. |
| Revision | string | The Revision value of the Item Revision. |
| Rev Effective From | string | The date and time the Item revision was effective from. Date must be entered as it appears in the Empower Database. |
| Rev Effective To | string | The date and time the Item revision was effective to. Date must be entered as it appears in the Empower Database. |
| [Custom Item Attribute] | string | This special search permits searching for strings in Item attributes created in Empower Administrator. Search must include the term "Attribute: attributeName". Example: Attribute: Lead Time |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Vendor Name | string | The name of the Vendor associated with the Item. |
| Request Info: Requested By | string | The user that created the object. |
| Request Info: Request Date | string | The date that the object was created. |
| Request Info: Release Date | string | The date that the object was released. |
| BOM Part Number | string | The Part Number of the BOM that includes this part as a child Item. |
| BOM Search: Refdes | string | The Reference Designator value for the Part when it is in a specific BOM. |
| BOM Search: Not Used | string | BOM Parts where the Part is not used. |

| Name | Value | Description |
|------------------|-----------------------|--|
| Comment | string | Comments associated with the object. |
| Substitute Parts | string | |
| UnderEco | Boolean/True or False | A value of 1 means true and the call will search for Items under a Change. A value of 0 means false and the call will search for Items not under a Change. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute BOM Search: Refdes should be typed as BOM%20Search:%20Refdes.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all items that have a Lifecycle of Released and are of the Category of Resistors. Sort the results by descending Part Number. Display the fields Number, Status, Description, Reason, Type, Category, and Lifecycle in results. Provide the third group of 60 from the sorted results.

GET

```
/items?Fields=Part%20Number,Status,Description,Reason,Type,Category,Lifecycle
&Sort=Number&Order=DESC&limit=60&Offset=2&Lifecycle=Released&Category=Resistors
```

```
{
  "Count": 60,
  "Results": [
```

```

    {
      "Guid": "10000000HR0000HVS",
      "Part Number": "28-0146-00",
      "Status": "Released",
      "Description": "Resistors, 10, 0805",
      "Type": "Electrical Part",
      "Category": "Resistors",
      "Lifecycle": "Released"
    },
    {
      "Guid": "10000000HQ0000HUA",
      "Part Number": "28-0145-00",
      "Status": "Released",
      "Description": "Resistors, 10, 1206",
      "Type": "Electrical Part",
      "Category": "Resistors",
      "Lifecycle": "Released"
    },
    {
      "Guid": "10000000HP0000HTR",
      "Part Number": "28-0144-00",
      "Status": "Released",
      "Description": "Resistors, 10, 1206",
      "Type": "Electrical Part",
      "Category": "Resistors",
      "Lifecycle": "Released"
    },
    ...
  ]
}

```

Get items with of the value of Assembly for Type and are added to a Change. Sort the results by descending Part number.

GET /items?Sort=Number&Order=DESC&Type=Assembly&UnderECO=1

```

{
  "Count": 12,
  "Results": [
    {
      "Guid": "10000000U00000YJ",
      "Part Number": "01-0082-00",
      "Description": "Medtec Pump Assembly",
      "Type": "Assembly",
      "Category": "Finished Goods",
      "Lifecycle": "Pending Release",
      "Revision": "1.0",
      "UnderECO": 1
    },
    {
      "Guid": "10000000PX0000Q2A",
      "Part Number": "80-0001-00",
      "Description": "PCB Assembly Satellite Receiver",
      "Type": "Assembly",
      "Category": "Assembly",
    }
  ]
}

```



```

        "Lifecycle": "Pending Release",
        "Revision": "1.0",
        "UnderECO": 1
    },
    {
        "Guid": "10000000RV0000S84",
        "Part Number": "SW-100200",
        "Description": "Solidworks Mitre Saw assembly",
        "Type": "Assembly",
        "Category": "Finished Goods",
        "Lifecycle": "Preliminary",
        "Revision": "1.0",
        "UnderECO": 1
    },
    ...
]
}

```

Search for all Items that are part of a BOM and is a reference designator value of R4 in a BOM. Sort the results by descending Part Number. Note for search attribute BOM Search: Refdes, spaces are encoded with %20.

GET /items?Sort=Number&Order=DESC&BOM%20Search:%20Refdes=R4

```

{
  "Count": 20,
  "Results": [
    {
      "Guid": "10000000E70000000",
      "Part Number": "28-0015-00",
      "Description": "Resistors, 50K, 1206",
      "Refdes": "R4",
      "BOM Part Number": "01-0007-02",
      "BOM Description": "Electrical Assembly",
      "BOM Rev": "2.0"
    },
    {
      "Guid": "10000000E70000000",
      "Part Number": "28-0015-00",
      "Description": "Resistors, 50K, 1206",
      "Refdes": "R4",
      "BOM Part Number": "01-0019-00",
      "BOM Description": "Project Alpha Top Level Assembly",
      "BOM Rev": "1.0"
    },
    {
      "Guid": "10000000E70000000",
      "Part Number": "28-0015-00",
      "Description": "Resistors, 50K, 1206",
      "Refdes": "R4",
      "BOM Part Number": "01-0022-00",
      "BOM Description": "Assembly, PCB Assembly, Project Delta PCB Assembly",
      "BOM Rev": "1.1"
    },
    {

```

```
    "Guid": "10000000E70000000",
    "Part Number": "28-0015-00",
    "Description": "Resistors, 50K, 1206",
    "Refdes": "R4",
    "BOM Part Number": "01-0026-00",
    "BOM Description": "Preliminary PCB Prototye",
    "BOM Rev": "1.0"
  },
  {
    "Guid": "10000000E70000000",
    "Part Number": "28-0015-00",
    "Description": "Resistors, 50K, 1206",
    "Refdes": "R4",
    "BOM Part Number": "01-0026-00",
    "BOM Description": "Preliminary PCB Prototye",
    "BOM Rev": "2.0"
  },
  {
    "Guid": "10000000E70000000",
    "Part Number": "28-0015-00",
    "Description": "Resistors, 50K, 1206",
    "Refdes": "R4",
    "BOM Part Number": "01-0026-00",
    "BOM Description": "Production Board for new Model compressor controller",
    "BOM Rev": "2.1"
  },
  ...
]
}
```

Request with an invalid search attribute. Empower API currently doesn't check the validity of the search attribute. Searching for an invalid attribute will result in no results.

GET /items?owner.Name=*Walker

```
{
  "Count": 0,
  "errors": []
}
```

GET Item General

/items/<GUID>

Returns an Item object with a given GUID. Note that while the standard practice is to retrieve an item GUID using the GET Items endpoint and then use an item GUID here (returning the effective revision), you can also use a GUID for a specific revision of an item here.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time n GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get a single item with a given GUID.

GET /items/GUID

```
{
  "Guid": "10000000XG00010C1",
  "PartNumber": "00-0037-00",
  "Description": "Description - Updated",
  "Type": "Finished Goods",
  "Category": "Touch Screens",
```

```
"Lifecycle": "Released",
"Rev": "C",
"RaisedBy": {
  "Guid": "185Q000013000000V"
},
"RaisedOn": "2021-02-10T01:34:59Z",
"ReleasedOn": "2021-02-10T02:02:59Z",
"SignoffStatus": "Released"
}
```

request with bad GUID

```
{
  "Errors": [
    {
      "Code": 2042,
      "Message": "The guid \"10000000XL00010J4DQ\" is not valid."
    }
  ]
}
```

GET Item Business Units

/items/<GUID>/businessUnits

Returns the business units of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time n GMT |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the business units of a single item with a given GUID.

GET /items/<GUID>/businessUnits

```
{
  "Count": 2,
  "Results": [
    {
      "Name": "Canada Engineering Center"
    },
    {
      "Name": "China Manufacturing Center"
    }
  ]
}
```

```
}  
]  
}
```

request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code":2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Item Projects

/items/<GUID>/projects

Returns the projects of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time n GMT |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the projects of a single item with a given GUID.

GET /items/<GUID>/projects

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "100200000C0000000",
      "Name": "00-0001-00",
      "Description": "The SmartHome Project"
    }
  ],
}
```

```
{
  {
    "Guid": "100200000D000000X",
    "Name": "00-0002-00",
    "Description": "The SmartWall: A SmartHome Project"
  }
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Item Substitute Parts

/items/<GUID>/substituteParts

Returns the substitute parts of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the substitute parts of a single item with a given GUID.

GET /items/<GUID>/substituteParts

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "10000000VF0000WKO",
      "PartNumber": "00-0006-00",
      "Description": "PCBA, SmartWall Digital Board"
    }
  ],
}
```

```
{
  {
    "Guid": "10000000VH0000WMP",
    "PartNumber": "00-0008-00",
    "Description": "Housing, Rear, SmartWall"
  }
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Attributes

/items/<GUID>/attributes

Returns the attributes of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT. |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the attributes of a single item with a given GUID.

GET /items/<GUID>/attributes

```
{
  "Count": 33,
  "Results": [
    {
      "Name": "Altium Footprint Reference",
      "Value": "REF-000002"
    },
    {

```

```
    "Name": "Altium Library Reference",  
    "Value": "Resister - non polarized"  
  },  
  {  
    "Name": "Audit Frequency",  
    "Value": "10 Days"  
  },  
  {  
    "Name": "Audit Object",  
    "Value": "True"  
  },  
  ...  
]  
}
```

request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Item Documents

/items/<GUID>/documents

Returns the documents of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT. |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the documents of a single item with a given GUID.

GET /items/<GUID>/documents

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "186H00007T000000N",
      "Title": "SmartWall release 2.0 Release Notes Draft",
      "Type": "Release Notes",
      "Version": "A",
    }
  ]
}
```

```
    "Notes": "doc notes",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "release_latest.txt"
  },
  {
    "Guid": "186H00007U000000W",
    "Title": "SmartWall Quick Assembly Diagram",
    "Type": "Datasheet",
    "Version": "A",
    "Notes": "Notes 111",
    "Keywords": "quickassembly",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "SmartWall_Quick_Assembly.pdf"
  }
]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Documents Content

`/items/<Item-GUID>/documents/<ItemDocument-GUID>/content`

Returns the content of a documents with a given GUID of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT. |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a documents.

GET /items/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```


GET Item Vendors

/items/<GUID>/vendors

Returns the vendors of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|------------------|---|
| authorization | | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT. |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Vendor GUIDs and associated Vendor Item GUIDs.

GET /items/<GUID>/vendors

```
{
  "Count": 4,
  "Results": [
    {
      "Guid": "185W0000NV0000001",
      "VendorItem": {
        "Guid": "1005000001000000M"
      }
    },
  ],
}
```

```
    "Notes": "Preferred Choice.",
    "CustomFields": []
  },
  {
    "Guid": "185W0000NX000000J",
    "VendorItem": {
      "Guid": "10050000LT0000001"
    },
    "Notes": "To be used only in the South American Markets",
    "CustomFields": []
  },
  {
    "Guid": "185W0000NW000000A",
    "VendorItem": {
      "Guid": "10050000L7000000D"
    },
    "Notes": "vendor part notes 2",
    "CustomFields": []
  },
  {
    "Guid": "185W0000NY000000S",
    "VendorItem": {
      "Guid": "10050000M4000000S"
    },
    "Notes": "",
    "CustomFields": []
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Service Objects

/items/<GUID>/serviceObjects

Returns all service objects associated with an Item.

Request Header

| Name | Value | Description |
|------------------|-----------------------|---|
| arena_session_id | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 400 compact items. |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDS of service objects associated with the Item.

GET /items/<GUID>/serviceObjects

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1006000001000000V"
    },
    {
      "Guid": "10060000020000005"
    },
    {
      "Guid": "1006000004000000N"
    }
  ]
}
```

GET Item Email History

/items/<GUID>/emailHistory

Returns the Email History of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of an Item with a given GUID.

GET /items/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Item Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "Item Released: 04-0017-00",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "04-0017-00 is released.<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Item...\"
    },
    {
      "Action": "Item Awaiting Release",
      "SentOn": "2021-04-01T01:40:57Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "Item Rejected - 04-0017-00",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "04-0017-00 Item for API testing<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Item...\"
    },
    {
      "Action": "Item Rejected",
      "SentOn": "2021-04-01T01:40:29Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "Item Rejected - 04-0017-00",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "04-0017-00 Item for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/>."
    },
    ...
  ]
}

```

Request with bad GUID

```

{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Item Viewing History

/items/<GUID>/viewingHistory

Returns the viewing history of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the viewing history of an Item with a given GUID.

GET /items/<GUID>/viewingHistory

```
{
  "Count": 19,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
      },
    },
  ],
}
```

```

        "Workstation": "63.246.474.219",
        "DateTime": "2021-03-10T00:07:25Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "Workstation": "63.246.474.219",
        "DateTime": "2021-03-07T08:38:44Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "Workstation": "63.246.474.219",
        "DateTime": "2021-03-07T08:38:43Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Sanders"
        },
        "Workstation": "103.210.240.66",
        "DateTime": "2021-02-23T02:55:01Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Sanders"
        },
        "Workstation": "103.210.240.70",
        "DateTime": "2021-02-10T04:28:24Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Sanders"
        },
        "Workstation": "103.210.240.70",
        "DateTime": "2021-02-10T04:16:37Z",
        "Tool": "Desktop"
    },
    {
        "User": {
            "Guid": "185Q000013000000V",
            "FullName": "Leon Lett"
        },
        "Workstation": "153.35.142.43",
    
```



```
        "DateTime": "2021-02-10T02:40:01Z",  
        "Tool": "Desktop"  
    },  
    ...  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Item Change History

/items/<GUID>/changeHistory

Returns the Change history of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Change history of an Item with a given GUID.

GET /items/<GUID>/changeHistory

```
{
  "Count": 12,
  "Results": [
    {
      "Action": "Added to a BOM",
      "Details": "Added to a BOM: Parent PartNumber: TEST-ITEM-4-ECO, Parent
Rev: 1.0",
      "Rev": "1.2",
```

```

        "User": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Sanders"
        },
        "DateTime": "2021-02-23T05:42:49Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Added to a BOM",
        "Details": "Added to a BOM: Parent PartNumber: 00-0039-00, Parent Rev:
1.0",
        "Rev": "1.2",
        "User": {
            "Guid": "185Q000013000000V",
            "FullName": "Leon Lett"
        },
        "DateTime": "2021-02-10T02:44:02Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Project Added",
        "Details": "FMEA-00002A",
        "Rev": "1.2",
        "User": {
            "Guid": "185Q00000H000000A",
            "FullName": "Raymond Chandler"
        },
        "DateTime": "2020-06-15T07:38:13Z",
        "Tool": "Desktop"
    },
    {
        "Action": "New Revision Created",
        "Details": "1.2",
        "Rev": "1.2",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-26T06:14:48Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Vendor Item Added",
        "Details": "Grayline : GR-001-223-16",
        "Rev": "1.1",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-26T06:14:12Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Vendor Item Added",
        "Details": "Digikey : 490-1318-1-ND",
    
```

```

        "Rev": "1.1",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-26T06:14:01Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Vendor Item Added",
        "Details": "Astec Power : APA501-00-025",
        "Rev": "1.1",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-26T06:13:49Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Item Released",
        "Details": "",
        "Rev": "1.1",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-25T00:44:00Z",
        "Tool": "ECO Processor: ECO-00037"
    },
    {
        "Action": "Revision Created",
        "Details": "1.1",
        "Rev": "1.1",
        "User": {
            "Guid": "185Q00000U000000M",
            "FullName": "Barbara McClintock"
        },
        "DateTime": "2020-04-25T00:44:00Z",
        "Tool": "ECO Processor: ECO-00037"
    },
    {
        "Action": "Vendor Item Added",
        "Details": "Tessier-Ashpool : TA-9654-004",
        "Rev": "1.0",
        "User": {
            "Guid": "185Q00000R000000U",
            "FullName": "Jonas Salk"
        },
        "DateTime": "2020-04-25T00:20:50Z",
        "Tool": "Desktop"
    },
    {
        "Action": "Description Changed",
        "Details": "From: Power Supplier, SmartWall to: Power Supply, SmartWall",
    }

```

```
    "Rev": "1.0",
    "User": {
      "Guid": "185Q00000R000000U",
      "FullName": "Jonas Salk"
    },
    "DateTime": "2020-04-25T00:18:15Z",
    "Tool": "Desktop"
  },
  {
    "Action": "Item Created",
    "Details": "",
    "Rev": "1.0",
    "User": {
      "Guid": "185Q00000R000000U",
      "FullName": "Jonas Salk"
    },
    "DateTime": "2020-04-25T00:05:19Z",
    "Tool": "Desktop"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Training

/items/<GUID>/trainings

Returns the GUIDs of Training objects associated with an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|------------------|---|
| authorization | | unique ID for session obtained from login |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | |

Sample Response Body

Returns the GUIDs of Training objects that include the Item as a Training Item.

GET /items/<GUID>/trainings

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "1007000003000003F"
    }
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

POST Item Document Upload

/items/<GUID>/documents

Uploads a document into the Documents page of an Item.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: SOP for System Access
type: Datasheet
notes: Released 1/20/21
Keywords: SOP
vault: Public
version: A
file: SOP_Systems_access.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page within an Item with a given GUID.

POST /items/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "SOP for System Access",
  "Type": "Datasheet",
  "Version": "A",
  "Notes": "Released 1/20/21",
  "Keywords": "SOP",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "SOP_Systems_Access.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Item Update General

/items/<GUID>

Updates the General page of an Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of an Item.

```
{
  "PartNumber": "00-0009-00",
  "Description": "Updated version of the Item",
  "Type": "Mechanical Part",
  "Category": "Bracket",
  "Lifecycle": "Preliminary"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of an Item with a given GUID.

PUT /items/<GUID>

```
{
  "Guid": "10000000VI0000WQ0",
  "PartNumber": "00-0009-00",
  "Description": "Updated version of the Item",
  "Type": "Mechanical Part",
  "Category": "Bracket",
  "Lifecycle": "Preliminary",
  "SignoffStatus": "Released",
  "Rev": "1.2",
  "RaisedBy": {
    "Guid": "185Q00000R000000U"
  },
  "RaisedOn": "2020-04-25T00:05:19Z",
  "ReleasedOn": "2020-04-25T00:44:00Z"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Item Update Attributes

/items/<GUID>/attributes

Updates the Attributes page of an Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of an Item.

```
[
  {
    "Name": "Altium Library Reference",
    "Value": "REF-00002",
  },
  {
    "Name": "Audit Frequency",
    "Value": "Quarterly"
  },
  {
    "Name": "Build/Buy",
    "Value": "Build"
  },
  ...
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|--------|----------------------------------|
| Content-Length | number | number of characters in response |

| Name | Value | Description |
|--------------|---------------------------------|---|
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of an Item with a given GUID.

PUT /items/<GUID>/attributes

```
{
  "Count": 6,
  "Results": [
    {
      "Name": "Altium Library Reference",
      "Value": "REF-00002",
    },
    {
      "Name": "Audit Frequency",
      "Value": "Quarterly"
    },
    {
      "Name": "Build/Buy",
      "Value": "Build"
    },
    ...
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item BOM

/items/<GUID>/bom

Returns the bill of materials of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the bill of materials of an Item with a given GUIDs.

GET /items/<GUID>/bom

```
{
  "Count": 16,
  "Results": [
    {
      "Guid": "185V00009G0000004",
      "Item": {
        "Guid": "100000000F00000JT"
      }
    }
  ]
}
```

```

        "ItemNumber": 1,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "1",
        "Refdes": "LBI",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "185V00009H000000D",
        "Item": {
            "Guid": "100000000G000000KC"
        },
        "ItemNumber": 2,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "2",
        "Refdes": "",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "185V00009I000000M",
        "Item": {
            "Guid": "1000000012000016J"
        },
        "ItemNumber": 3,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "3",
        "Refdes": "",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    },

```

```
{
  "Guid": "185V00009J000000V",
  "Item": {
    "Guid": "100000001W0000216"
  },
  "ItemNumber": 4,
  "Qty": "1",
  "UOM": "ea",
  "FindNumber": "4",
  "Refdes": "",
  "Alternates": "",
  "Notes": "",
  "Special": "",
  "CustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ]
},
{
  "Guid": "185V00009K0000005",
  "Item": {
    "Guid": "100000001X0000220"
  },
  "ItemNumber": 5,
  "Qty": "1",
  "UOM": "ea",
  "FindNumber": "5",
  "Refdes": "",
  "Alternates": "",
  "Notes": "",
  "Special": "",
  "CustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ]
},
{
  "Guid": "185V00009L000000E",
  "Item": {
    "Guid": "10000000PK0000POE"
  },
  "ItemNumber": 8,
  "Qty": "1",
  "UOM": "ea",
  "FindNumber": "8",
  "Refdes": "",
  "Alternates": "",
  "Notes": "",
  "Special": "",
  "CustomFields": [
    {
```



```

        "Name": "Scrap Percentage (%)",
        "Value": ""
    }
]
},
{
    "Guid": "185V00009M000000N",
    "Item": {
        "Guid": "10000000PL0000PPW"
    },
    "ItemNumber": 9,
    "Qty": "1",
    "UOM": "ea",
    "FindNumber": "9",
    "Refdes": "",
    "Alternates": "",
    "Notes": "",
    "Special": "",
    "CustomFields": [
        {
            "Name": "Scrap Percentage (%)",
            "Value": ""
        }
    ]
},
{
    "Guid": "185V00009N000000W",
    "Item": {
        "Guid": "10000000PM0000PQF"
    },
    "ItemNumber": 10,
    "Qty": "1",
    "UOM": "ea",
    "FindNumber": "10",
    "Refdes": "RFS1",
    "Alternates": "",
    "Notes": "",
    "Special": "",
    "CustomFields": [
        {
            "Name": "Scrap Percentage (%)",
            "Value": ""
        }
    ]
},
{
    "Guid": "185V00009O0000006",
    "Item": {
        "Guid": "10000000PB0000PFR"
    },
    "ItemNumber": 11,
    "Qty": "1.5",
    "UOM": "in",
    "FindNumber": "11",
    "Refdes": "",

```

```
"Alternates": "",
"Notes": "",
"Special": "",
"CustomFields": [
  {
    "Name": "Scrap Percentage (%)",
    "Value": ""
  }
]
},
{
  "Guid": "185V00009P000000F",
  "Item": {
    "Guid": "10000000K80000KC8"
  },
  "ItemNumber": 12,
  "Qty": "20",
  "UOM": "ea",
  "FindNumber": "",
  "Refdes": "SC1-20",
  "Alternates": "",
  "Notes": "",
  "Special": "",
  "CustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ]
},
{
  "Guid": "185V00009Q0000000",
  "Item": {
    "Guid": "100000000H00000LU"
  },
  "ItemNumber": 13,
  "Qty": "1",
  "UOM": "ea",
  "FindNumber": "12",
  "Refdes": "SIM1",
  "Alternates": "",
  "Notes": "",
  "Special": "",
  "CustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ]
},
{
  "Guid": "185V00009R000000X",
  "Item": {
    "Guid": "100000001Y0000237"
  },
}
```

```

        "ItemNumber": 14,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "13",
        "Refdes": "",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "185V00009S0000007",
        "Item": {
            "Guid": "10000000PN0000PRX"
        },
        "ItemNumber": 15,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "14",
        "Refdes": "",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "185V00009T000000G",
        "Item": {
            "Guid": "10000000PO0000PSG"
        },
        "ItemNumber": 16,
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "15",
        "Refdes": "",
        "Alternates": "",
        "Notes": "",
        "Special": "",
        "CustomFields": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },

```

```

    {
      "Guid": "185V00009U000000P",
      "Item": {
        "Guid": "100000000I00000MD"
      },
      "ItemNumber": 17,
      "Qty": "1",
      "UOM": "ea",
      "FindNumber": "16",
      "Refdes": "LB2",
      "Alternates": "",
      "Notes": "",
      "Special": "",
      "CustomFields": [
        {
          "Name": "Scrap Percentage (%)",
          "Value": ""
        }
      ]
    },
    {
      "Guid": "185V00009V000000Y",
      "Item": {
        "Guid": "1000000020000024W"
      },
      "ItemNumber": 18,
      "Qty": "1",
      "UOM": "ea",
      "FindNumber": "17",
      "Refdes": "",
      "Alternates": "",
      "Notes": "",
      "Special": "",
      "CustomFields": [
        {
          "Name": "Scrap Percentage (%)",
          "Value": ""
        }
      ]
    }
  ]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Item BOM Configurations

/items/<GUID>/bomConfigurations

Returns the bom configuration of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the bill of materials configuration of an Item with a given GUIDs.

GET /items/<GUID>/bomConfigurations

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "100G000006000000Q",
      "Name": "North America Shippable Configuration",
      "Description": "",
      "Status": "Completed",
    }
  ]
}
```

```

    "Type": "",
    "Created": "2014-12-17T12:10:35Z",
    "CreatedBy": {
      "Guid": "185Q0000010000006"
    },
    "Edited": "2014-12-17T12:10:43Z",
    "EditedBy": {
      "Guid": "185Q0000010000006"
    },
    "CustomFields": []
  },
  {
    "Guid": "100G000005000000H",
    "Name": "EU Shippable Configuration",
    "Description": "",
    "Status": "Completed",
    "Type": "",
    "Created": "2014-12-17T12:10:23Z",
    "CreatedBy": {
      "Guid": "185Q0000010000006"
    },
    "Edited": "2014-12-17T12:10:53Z",
    "EditedBy": {
      "Guid": "185Q0000010000006"
    },
    "CustomFields": []
  },
  {
    "Guid": "100G0000040000008",
    "Name": "United Kingdom Shippable Configuration",
    "Description": "",
    "Status": "Completed",
    "Type": "",
    "Created": "2014-12-17T12:10:11Z",
    "CreatedBy": {
      "Guid": "185Q0000010000006"
    },
    "Edited": "2014-12-17T12:11:02Z",
    "EditedBy": {
      "Guid": "185Q0000010000006"
    },
    "CustomFields": []
  }
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

```
]
}
```

GET Item Configured BOM

/items/<Item-GUID>/bomConfigurations/<BOMConfiguration-GUID>/configuredBom

Returns the configured bom with a given GUID of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the configured BOM with a given GUID of an Item with a given GUID.

GET /items/<GUID>/bomConfigurations/<GUID>/configuredBOM

```
{
  "Count": 9,
  "Results": [
    {
      "Item": {
        "Guid": "10000000PH0000PLU"
      },
      "ItemNumber": 1,
    }
  ]
}
```



```
"Qty": "1",
"FindNumber": "",
"Refdes": "",
"Special": "",
"BOMCustomFields": [
  {
    "Name": "Scrap Percentage (%)",
    "Value": ""
  }
],
"CustomFields": [],
"VendorItems": []
},
{
  "Item": {
    "Guid": "10000000PF0000PJT"
  },
  "ItemNumber": 2,
  "Qty": "1",
  "FindNumber": "",
  "Refdes": "",
  "Special": "",
  "BOMCustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ],
  "CustomFields": [],
  "VendorItems": []
},
{
  "Item": {
    "Guid": "10000000PG0000PKC"
  },
  "ItemNumber": 3,
  "Qty": "1",
  "FindNumber": "",
  "Refdes": "",
  "Special": "",
  "BOMCustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ],
  "CustomFields": [],
  "VendorItems": []
},
{
  "Item": {
    "Guid": "10000000Q00000Q4I"
  },
  "ItemNumber": 4,
  "Qty": "1",
```

```
"FindNumber": "",
"Refdes": "",
"Special": "",
"BOMCustomFields": [
  {
    "Name": "Scrap Percentage (%)",
    "Value": ""
  }
],
"CustomFields": [],
"VendorItems": []
},
{
  "Item": {
    "Guid": "10000000PU0000SSL"
  },
  "ItemNumber": 5,
  "Qty": "1",
  "UOM": "",
  "FindNumber": "",
  "Refdes": "",
  "Special": "",
  "BOMCustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ],
  "CustomFields": [],
  "VendorItems": []
},
{
  "Item": {
    "Guid": "10000000PY0000Q3S"
  },
  "ItemNumber": 6,
  "Qty": "1",
  "FindNumber": "",
  "Refdes": "",
  "Special": "",
  "BOMCustomFields": [
    {
      "Name": "Scrap Percentage (%)",
      "Value": ""
    }
  ],
  "CustomFields": [],
  "VendorItems": []
},
{
  "Item": {
    "Guid": "10000000PC0000PGA"
  },
  "ItemNumber": 7,
  "Qty": "1",
```

```
    "FindNumber": "",
    "Refdes": "",
    "Special": "",
    "BOMCustomFields": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ],
    "CustomFields": [],
    "VendorItems": []
  },
  {
    "Item": {
      "Guid": "100000000T00000X1"
    },
    "ItemNumber": 8,
    "Qty": "1",
    "FindNumber": "",
    "Refdes": "",
    "Special": "",
    "BOMCustomFields": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ],
    "CustomFields": [],
    "VendorItems": []
  },
  {
    "Item": {
      "Guid": "100000000S60000SNQ"
    },
    "ItemNumber": 10,
    "Qty": "1",
    "UOM": "",
    "FindNumber": "",
    "Refdes": "",
    "Special": "",
    "BOMCustomFields": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ],
    "CustomFields": [],
    "VendorItems": []
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET BOM Routing GUID

/items/<GUID>/routingGUID

Returns the BOM Routing GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the BOM Routing GUID.

GET /items/<GUID>/routingGUID

```
{
  "Guid": "1009000020000000S"
}
```

Request with bad GUID

```
{
  "status": 400,
}
```

```
"errors":[
  {
    "code": 2042,
    "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
  }
]
```

GET Item Routing Operations

/items/<GUID>/routingOperations

Returns the routing operations of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the routing operations of an Item with a given GUID.

GET /items/<GUID>/routingOperations

```
{
  "Count": 14,
  "Results": [
    {
      "Guid": "186E000001000000A",
      "Name": "Operation-1",
      "Description": "Prepare Board for Chassis",
      "CustomFields": []
    }
  ]
}
```

```
    },
    {
      "Guid": "186E000002000000J",
      "Name": "Operation-2",
      "Description": "Assemble main board",
      "CustomFields": []
    },
    {
      "Guid": "186E000003000000S",
      "Name": "Operation-3",
      "Description": "Ribbon Cable Setup",
      "CustomFields": []
    },
    {
      "Guid": "186E0000040000002",
      "Name": "Operation-4",
      "Description": "Headphone Setup",
      "CustomFields": []
    },
    {
      "Guid": "186E000005000000B",
      "Name": "Operation-5",
      "Description": "Board Mounting",
      "CustomFields": []
    },
    {
      "Guid": "186E000006000000K",
      "Name": "Operation-6",
      "Description": "Connector Preparation",
      "CustomFields": []
    },
    {
      "Guid": "186E000007000000T",
      "Name": "Operation-7",
      "Description": "Attach Board to Screen",
      "CustomFields": []
    },
    {
      "Guid": "186E0000080000003",
      "Name": "Operation-8",
      "Description": "Connector Setup",
      "CustomFields": []
    },
    {
      "Guid": "186E000009000000C",
      "Name": "Operation-9",
      "Description": "Attach Ribbon Cable",
      "CustomFields": []
    },
    {
      "Guid": "186E00000A000000L",
      "Name": "Operation-10",
      "Description": "SIM Card",
      "CustomFields": []
    }
  ],
  {
    "Guid": "186E000000000000",
    "Name": "Operation-1",
    "Description": "Initial Setup",
    "CustomFields": []
  }
],
{
  "Guid": "186E000000000000",
  "Name": "Operation-1",
  "Description": "Initial Setup",
  "CustomFields": []
}
```



```
{
  {
    "Guid": "186E00000B000000U",
    "Name": "Operation-11",
    "Description": "Board/Chassis Assembly",
    "CustomFields": []
  },
  {
    "Guid": "186E00000C0000004",
    "Name": "Operation-12",
    "Description": "Back Panel Setup",
    "CustomFields": []
  },
  {
    "Guid": "186E00000D000000D",
    "Name": "Operation-13",
    "Description": "Bezel Setup",
    "CustomFields": []
  },
  {
    "Guid": "186E00000E000000M",
    "Name": "Operation-14",
    "Description": "Final Assembly",
    "CustomFields": []
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Routing Sequences

/items/<Item-GUID>/routingOperations/<GUID>/sequences

Returns a specific routing sequences of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the routing sequences of an Item with a given GUID.

GET /items/<GUID>/routingOperations/<GUID>/sequences

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186F00000W000000I",
      "Name": "Sequence-1",
      "Description": "Desc of Sequence-1",
      "MachineName": "Machine 1",
    }
  ]
}
```

```
    "QueueTime": 10.0000,  
    "SetupTime": 20.0000,  
    "MachineTime": 30.0000,  
    "LaborTime": 40.0000,  
    "MoveTime": 50.0000,  
    "VariableTime": 100.0000,  
    "CustomFields": []  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Item Routing BOM Items

/items/<Item-GUID>/routingOperations/<GUID>/bomItems

Returns BOM Items associated with a routing operation with a given GUID of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the BOM Items of a routing operation of a given GUID of an Item with a given GUID.

GET /items/<GUID>/routingOperations/<GUID>/bomItems

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186G000001000000S",
      "Sequence": {
        "Guid": "186F000001000000J"
      }
    }
  ],
}
```

```
    "Item": {
      "Guid": "10000000PB0000PFR"
    },
    "Qty": "0.8",
    "Identifier": "",
    "Notes": "",
    "CustomFields": []
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Routing Operation Documents

/items/<Item-GUID>/routingOperations/<GUID>/documents

Returns documents associated with a routing operation with a given GUID of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the documents of a routing operation of a given GUID of an Item with a given GUID.

GET /items/<GUID>/routingOperations/<GUID>/bomItems

```
{
  "Count": 27,
  "Results": [
    {
      "Guid": "186H0000010000002",
      "Sequence": {
        "Guid": "186F000001000000J"
      }
    },
  ],
}
```

```
    "Title": "Operation 1 Sequence 1",
    "Type": "Work Instruction Pictures",
    "IsVaulted": true,
    "FileNameOrUrl": "Operation 1 Sequence 1.jpg"
  },
  {
    "Guid": "186H000002000000B",
    "Sequence": {
      "Guid": "186F000002000000S"
    },
    "Title": "Operation 2 Sequence 1",
    "Type": "Work Instruction Pictures",
    "IsVaulted": true,
    "FileNameOrUrl": "Operation 2 Sequence 1.jpg"
  },
  {
    "Guid": "186H000003000000K",
    "Sequence": {
      "Guid": "186F0000030000002"
    },
    "Title": "Operation 3 Sequence 1",
    "Type": "Work Instruction Pictures",
    "IsVaulted": true,
    "FileNameOrUrl": "Operation 3 Sequence 1.jpg"
  },
  {
    "Guid": "186H000004000000T",
    "Sequence": {
      "Guid": "186F000004000000B"
    },
    "Title": "Operation 4 Sequence 1",
    "Type": "Work Instruction Pictures",
    "IsVaulted": true,
    "FileNameOrUrl": "Operation 4 Sequence 1.jpg"
  },
  ...
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Routing Operation Document Content

/items/<Item-GUID>/routingOperations/<GUID>/documents/<DOC-GUID>/content

Returns the content of a document of a routing operation of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a documents.

GET /items/<GUID>/routingOperations/<GUID>/documents/<DOC-GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```



```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Item Revisions

/items/<GUID>/revisions

Returns all the revisions of an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns all the revisions of an Item with a given GUID.

GET /items/<GUID>/revisions

```
{
  "Count": 3,
  "Results": [
    {
      "ItemGuid": "10000000XG00010C1",
      "Rev": "C",
      "IsActive": true
    }
  ],
}
```

```
{
  {
    "ItemGuid": "10000000XG00010BR",
    "Rev": "B",
    "IsActive": false
  },
  {
    "ItemGuid": "10000000XG00010AI",
    "Rev": "A",
    "IsActive": false
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Changes

/items/<GUID>/changes

Returns the GUID of Changes associated with an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Changes associated with an Item with a given GUID.

GET /items/<GUID>/changes

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "10010000250000001"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Quality

/items/<GUID>/quality

Returns the GUID of Quality objects associated with an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Quality objects associated with an Item with a given GUID.

GET /items/<GUID>/quality

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100400000N0000001"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Comments

`/items/<GUID>/comments`

Returns the comments associated with an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the comments associated with an Item with a given GUID.

GET `/items/<GUID>/comments`

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T0000090000000",
      "Creator": {
        "Guid": "185Q000013000000V"
      }
    }
  ]
}
```



```
    "Type": "Approval Comment",
    "CommentText": "Comment 1",
    "IsSolution": false,
    "CreatedOn": "2021-02-10T01:49:23Z"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Item Associations

/items/<GUID>/associations

Returns the object associations associated with an Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the associations associated with an Item with a given GUID.

GET /items/<GUID>/associations

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "185U00007L000000Q",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000VG0000WL7"
      }
    }
  ]
}
```

```
    }
  },
  {
    "Guid": "185U00007K000000H",
    "AssociatedObject": {
      "ObjectType": "Item",
      "Guid": "10000000VH0000WMP"
    }
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Where Associated

/items/<GUID>/whereAssociated

Returns the objects where an Item with a given GUID is listed as an association..

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the objects where the Item itself is listed as an association.

GET /items/<GUID>/whereAssociated

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Quality",
      "Guid": "100400000N0000001"
    }
  ]
}
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Where Used

/items/<GUID>/whereUsed

Returns all objects where an Item is used.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------------------|---------|--|
| includeAllItemRevs | boolean | Specifies the search to include all Item revisions in the query if set equal to true. |
| includeAllBOMRevs | boolean | Specifies the search to include all BOM revisions where the Item is used if set equal to true. |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all items where an Item with a given GUID is used.

GET /items/<GUID>/WhereUsed

```
{
  "Count": 2,
  "Results": [
    {
      "Item": {
        "Guid": "10000000S50000SM8"
      },
      "ItemNumber": "9",
      "Qty": "1",
      "UOM": "ea",
      "FindNumber": "9",
      "Refdes": "",
      "Notes": "",
      "Special": "",
      "BOMAttributes": [
        {
          "Name": "Scrap Percentage (%)",
          "Value": ""
        }
      ]
    },
    {
      "Item": {
        "Guid": "10000000060000TM3"
      },
      "ItemNumber": "9",
      "Qty": "1",
      "FindNumber": "9",
      "Refdes": "",
      "Notes": "",
      "Special": "",
      "BOMAttributes": [
        {
          "Name": "Scrap Percentage (%)",
          "Value": ""
        }
      ]
    }
  ]
}
```

Get all Items

GET /items?WhereUsed?includeAllItemRevs=true&includeAllBOMRevs=true

```
{
  "Count": 4,
  "Results": [
    {
```

```

        "Item": {
            "Guid": "100000000600000A7"
        },
        "ItemNumber": "9",
        "Qty": "1",
        "FindNumber": "9",
        "Refdes": "",
        "Notes": "",
        "Special": "",
        "BOMAttributes": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Item": {
            "Guid": "100000000S50000SM8"
        },
        "ItemNumber": "9",
        "Qty": "1",
        "UOM": "ea",
        "FindNumber": "9",
        "Refdes": "",
        "Notes": "",
        "Special": "",
        "BOMAttributes": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Item": {
            "Guid": "100000000600000TLT"
        },
        "ItemNumber": "9",
        "Qty": "1",
        "FindNumber": "9",
        "Refdes": "",
        "Notes": "",
        "Special": "",
        "BOMAttributes": [
            {
                "Name": "Scrap Percentage (%)",
                "Value": ""
            }
        ]
    },
    {
        "Item": {
            "Guid": "100000000600000TM3"
        },
    },

```



```
"ItemNumber": "9",
"Qty": "1",
"FindNumber": "9",
"Refdes": "",
"Notes": "",
"Special": "",
"BOMAttributes": [
  {
    "Name": "Scrap Percentage (%)",
    "Value": ""
  }
]
}
```

GET Where Used As Alternate

`/items/<GUID>/whereUsedAsAlternate`

Returns all objects where an Item is used as an alternate part.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|-------------------|---------|--|
| includeAllBOMRevs | boolean | Search where used as alternate through all BOM revisions if set equal to true. |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns all objects where the Item with a given GUID is used as an alternate part.

GET `/items/<GUID>/WhereUsedAsAlternate?includeAllBOMRevs=true`

```
{
  "Count": 1,
  "Results": [
    {
      "AsAlternateFor": {
        "Guid": "10000000VI0000WQ0"
      },
      "Item": {
        "Guid": "10000000XI00010E2"
      },
      "ItemNumber": "1",
      "Qty": "1",
      "UOM": "EA",
      "FindNumber": "",
      "Refdes": "",
      "Notes": "",
      "Special": "",
      "BOMAttributes": [
        {
          "Name": "Scrap Percentage (%)",
          "Value": ""
        }
      ]
    }
  ]
}
```

GET Where Pending Operations

`/items/<GUID>/whereUsedPendingOperations`

Returns Where Used Pending Operation objects. Pending Operations include Changes/ECOs that involve a BOM where an Item with a given GUID is used.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns pending operation objects that detail a pending Change that affects the BOM in which an Item with a given GUID is used.

GET `/items/<GUID>/whereUsedPendingOperations`

```
{
  "Count": 1,
  "Results": [
    {
      "Change": {
        "Guid": "1001000026000000A"
      }
    }
  ]
}
```

```
    },
    "Item": {
      "Guid": "10000000XI00010E2"
    },
    "ItemNumber": "2",
    "Qty": "1",
    "UOM": "EA",
    "FindNumber": "",
    "Refdes": "",
    "Notes": "",
    "Special": "",
    "BOMAttributes": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ]
  }
]
```

GET Changes (Search)

/changes

Returns a collection of Change objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|--|--------|---|
| Change Number | string | The number of the Change. |
| Description | string | The Description of the field of a Change. |
| Reason | string | The Reason field within the General page of a Change. |
| Type | string | The Change Type. |
| Status | string | The Status of the Change. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| Priority | string | The priority level of the Change. |
| Project | string | Projects assigned to this Change. |
| Business Unit | string | Business Units assigned to this Change. |
| [Custom Changes Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Changes Attribute] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| [Attribute Material Disposition Field] | string | Search by custom Material Disposition Fields created within Empower Administrator. Use the format: Material Disposition: <Custom Material Disposition Name> |
| Request Info: Raised By | string | The user that created the object. |
| Request Info: Raised On | string | The date that the object was created. |
| Request Info: Released On | string | The date that the object was released. |
| Request Info: Canceled On | string | The date that the Change was cancelled on. |
| Request Info: Implemented On | string | The date that the Change was implemented on. |
| Document File Path/Name | string | The actual name of the file or the file path of the Document associated with the object. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Comment | string | Comments associated with the object. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Change Number should be typed as Change%20Number.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Changes with a Status of Pending. Display the first group of 20 results. Along with the GUID, display these fields in the results: Number, Status, Description, Reason, and Type.

GET

`/changes?Offset=0&Limit=20&Fields=Number,Status,Description,Reason,Type&Sort=Number&Order=DESC&Status=Pending`

```
{
  "Count": 20,
  "Results": [
    {
      "Guid": "100100002W000000Y",
      "Number": "ECO-00104",
      "Status": "Pending",
      "Description": "Release new revision",
      "Reason": "Reduce costs",
      "Type": "ECO"
    },
    {
      "Guid": "100100002V000000P",
      "Number": "ECO-00103",
      "Status": "Pending",
      "Description": "Swap Boards",
      "Reason": "reduce costs",
      "Type": "ECO"
    }
  ],
}
```



```
{
  "Guid": "100100002U000000G",
  "Number": "ECO-00101",
  "Status": "Pending",
  "Description": "Release Spring Version",
  "Reason": "Per meeting this rev is ready to go.",
  "Type": "ECO"
},
{
  "Guid": "100100002R000000O",
  "Number": "ECO-00099",
  "Status": "Pending",
  "Description": "Release New SmartWrist Design",
  "Reason": "In accordance with our Q3 Goals",
  "Type": "ECO"
},
{
  "Guid": "100100002O000000W",
  "Number": "ECO-00096",
  "Status": "Pending",
  "Description": "Update SOP.",
  "Reason": "New 2021 FDA Regulations require we update our SOP.",
  "Type": "ECO"
},
{
  "Guid": "100100002G000000U",
  "Number": "ECO-00088",
  "Status": "Pending",
  "Description": "Replace fans in SmartLamp.",
  "Reason": "Test",
  "Type": "ECO"
},
{
  "Guid": "100100002F000000L",
  "Number": "ECO-00087",
  "Status": "Pending",
  "Description": "Changing reference designator",
  "Reason": "It is required that we add resistors.",
  "Type": "ECO"
},
{
  "Guid": "100100002C000000T",
  "Number": "ECO-00084",
  "Status": "Pending",
  "Description": "Adding new Reference Designator",
  "Reason": "Increase Resistance",
  "Type": "ECO"
},
{
  "Guid": "1001000027000000J",
  "Number": "ECO-00079",
  "Status": "Pending",
  "Description": "Fix typos in SOP - do not trigger re-training",
  "Reason": "Fix typos in SOP",
  "Type": "ECO"
}
```

```

        },
        ...
    ]
}
    
```

Get Change Number ECO-00002. Display the following fields in the results: Number, Status, Description, Reason, and Type.

GET

/changes?Fields=Number,Status,Description,Reason,Type&Change%20Number=ECO-00002

```

{
  "Count": 1,
  "Results": [
    {
      "Guid": "100100000300000004",
      "Number": "ECO-00002",
      "Status": "Pending",
      "Description": "Product Release Demo for Solidworks saw assembly",
      "Reason": "To demonstrate a product release for a mechanical assembly using Empower",
      "Type": "ECO"
    }
  ]
}
    
```

Get all Changes that has a value of Use As Is for Material Disposition: Finished Goods and a value of Pending for Status.

GET /changes?Material Disposition: Finished Goods=Use As Is&Status=Pending

```

{
  "Count": 2,
  "Results": [
    {
      "Guid": "100100000Y00000003",
      "Change Number": "ECO-00034",
      "Type": "ECO",
      "Status": "Pending",
      "Reason": "test for pending vendore item",
      "Description": "Test for vendor item rule",
      "Material Disposition: Finished Goods": "Use As Is"
    },
    {
      "Guid": "100100001Q00000008",
      "Change Number": "ECO-00064",
      "Type": "ECO",
      "Status": "Pending",
      "Reason": "Release variant assembly",
      "Description": "Release child items and assembly to production revs",
      "Material Disposition: Finished Goods": "Use As Is"
    }
  ]
}
    
```

Request with an invalid search attribute. Empower API currently doesn't check the validity of the search attribute. Searching for an invalid attribute will result in no results.

GET /changes?APPROVER.Name=*Nelson

```
{
  "Count": 0,
  "errors": []
}
```

GET Change/ECO General

/changes/<GUID>

Returns a Change object of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a Change object that contains the General information of a Change/ECO of a Change/ECO with a given GUID.

GET /changes/<GUID>

```
{
  "Guid": "10010000030000004",
  "Number": "ECO-00002",
  "Type": "ECO",
  "Priority": "Normal",
  "Description": "Product Release Demo for Solidworks saw assembly",
  "Reason": "To demonstrate a product release for a mechanical assembly using
```

```
Empower",
  "SignoffStatus": "Pending",
  "CustomFields": [
    {
      "Name": "Stop Ship Required",
      "Value": "No"
    },
    {
      "Name": "Product Recall Required",
      "Value": "No"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Attributes

/changes/<GUID>/attributes

Returns the attributes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the attributes of a Change/ECO with a given GUID.

GET /changes/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Affects SmartHome Initiative",
      "Value": "Yes"
    },
    {

```

```
    "Name": "Change Cost > 5K",  
    "Value": "Yes"  
  },  
  {  
    "Name": "Market",  
    "Value": "North America"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Change/ECO Business Units

/changes/<GUID>/businessUnits

Returns the Business Units of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the business units of a Change/ECO with a given GUID.

GET /changes/<GUID>/businessUnits

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Canada Engineering"
    },
    {
      "Name": "China Manufacturing"
    }
  ]
}
```



```
    },  
    {  
      "Name": "UK Researching"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Change/ECO Projects

/changes/<GUID>/projects

Returns the projects of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on Projects of a Change/ECO with a given GUID.

GET /changes/<GUID>/projects

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1002000005000000V",
      "Name": "FMEA-00001",
      "Description": "Define team for Oxygen Pump FMEA Analysis"
    }
  ],
}
```

```
{
  {
    "Guid": "1002000003000000D",
    "Name": "MEP-00001",
    "Description": "Next Generation Portable Oxygen Pump Mechanical Packaging
Development"
  },
  {
    "Guid": "1002000001000000U",
    "Name": "NGP-00001",
    "Description": "Next Generation Oxygen Pump"
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Affected Items

/changes/<GUID>/affectedItems

Returns the affected Items of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on the affected Items of a Change/ECO with a given GUID.

GET /changes/<GUID>/affectedItems

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185Y00009B000000L",
      "Item": {
        "ObjectType": "Item",
        "Guid": "10000000XN00010L5"
      }
    }
  ]
}
```

```
    },
    "OldRev": "1.0",
    "NewRev": "1.1",
    "OldRevStatus": "Released",
    "OldRevNewStatus": "Released",
    "NewRevStatus": "Released",
    "Effective": "2021-11-11T00:00:00Z",
    "Notes": "notes",
    "DispositionFields": [
      {
        "Name": "On Order",
        "Value": "Scrap"
      },
      {
        "Name": "In Stock",
        "Value": "Use As Is"
      },
      {
        "Name": "WIP",
        "Value": "Scrap"
      },
      {
        "Name": "Finished Goods",
        "Value": "Scrap"
      },
      {
        "Name": "Field Units",
        "Value": "Scrap"
      }
    ]
  }
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Documents

/changes/<GUID>/documents

Returns the documents of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on the documents of a Change/ECO with a given GUID.

GET /changes/<GUID>/documents

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186H00000D0000005",
      "Title": "01E-0001 SOP Systems Access",
      "Type": "",
      "Version": "1",
    }
  ]
}
```

```
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "01E-0001 SOP Systems Access.pdf"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change Documents Content

/changes/<Change-GUID>/documents/<ChangeDocument-GUID>/content

Returns the content of a documents with a given GUID of an Change object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /changes/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```



```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Change/ECO Tasks

/changes/<GUID>/tasks

Returns the tasks of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on the tasks of a Change/ECO with a given GUID.

GET /changes/<GUID>/tasks

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "1865000004000000Q",
      "Index": 1,
      "TaskName": "In House Disposition",
      "Time": 0.0,
    }
  ]
}
```

```

"TimeUnit": "",
"PctComplete": 0.0,
"Notes": "",
"Priority": "",
"ChildTasks": [
  {
    "Guid": "1865000001000000Y",
    "Index": 2,
    "TaskName": "Implement and Disposition Stock Room",
    "Time": 0.0,
    "TimeUnit": "Day",
    "PctComplete": 0.0,
    "Notes": "Please note serial number implemented at in this space",

    "Priority": "",
    "ChildTasks": [],
    "Resources": [
      {
        "Guid": "185Q0000010000006"
      }
    ],
    "PredecessorIndexes": [],
    "References": [],
    "CustomFields": []
  },
  {
    "Guid": "18650000020000008",
    "Index": 3,
    "TaskName": "Implement and disposition in WIP on shop floor",
    "Time": 0.0,
    "TimeUnit": "Day",
    "PctComplete": 0.0,
    "Notes": "Please note serial number implemented at in this space",

    "Priority": "",
    "ChildTasks": [],
    "Resources": [
      {
        "Guid": "185Q0000010000006"
      }
    ],
    "PredecessorIndexes": [],
    "References": [],
    "CustomFields": []
  },
  {
    "Guid": "1865000003000000H",
    "Index": 4,
    "TaskName": "Assess and implement on required Field Units",
    "Time": 0.0,
    "TimeUnit": "Day",
    "PctComplete": 0.0,
    "Notes": "Please note serial customers that were implemented at
in this space",
    "Priority": "",

```

```

        "ChildTasks": [],
        "Resources": [
            {
                "Guid": "185Q0000010000006"
            }
        ],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": []
    }
],
"Resources": [],
"PredecessorIndexes": [],
"References": [],
"CustomFields": []
},
{
    "Guid": "18650000050000000",
    "Index": 5,
    "TaskName": "Disposition and Implementation at CM",
    "Time": 0.0,
    "TimeUnit": "",
    "PctComplete": 0.0,
    "Notes": "",
    "Priority": "",
    "ChildTasks": [
        {
            "Guid": "18650000060000009",
            "Index": 6,
            "TaskName": "Notification of CM performed",
            "Time": 0.0,
            "TimeUnit": "Day",
            "PctComplete": 0.0,
            "Notes": "",
            "Priority": "",
            "ChildTasks": [],
            "Resources": [
                {
                    "Guid": "185Q0000010000006"
                }
            ],
            "PredecessorIndexes": [],
            "References": [],
            "CustomFields": []
        },
        {
            "Guid": "1865000007000000I",
            "Index": 7,
            "TaskName": "Verification from CM implementation completed",
            "Time": 0.0,
            "TimeUnit": "Day",
            "PctComplete": 0.0,
            "Notes": "Please note serial number implemented at in this space
from CM",
            "Priority": "",

```

```
        "ChildTasks": [],
        "Resources": [
          {
            "Guid": "185Q0000010000006"
          }
        ],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": []
      }
    ],
    "Resources": [],
    "PredecessorIndexes": [],
    "References": [],
    "CustomFields": []
  }
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Comments

/changes/<GUID>/comments

Returns the comments of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on the comments of a Change/ECO with a given GUID.

GET /changes/<GUID>/comments

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T000000000000U",
      "Creator": {
        "Guid": "185Q0000140000005"
      }
    }
  ]
}
```

```
        "Type": "",
        "CommentText": "Release should coincide with stop ship release in
ECO-0000432.",
        "IsSolution": false,
        "CreatedOn": "2021-02-23T05:48:34Z"
    }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Associations

/changes/<GUID>/associations

Returns the associations of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information on the associations of a Change/ECO with a given GUID.

GET /changes/<GUID>/associations

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185U00007W000000K",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000VG0000WL7"
      }
    }
  ]
}
```



```
}
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change Where Associated

/changes/<GUID>/whereAssociated

Returns the objects which list the Change object with a given GUID as an association.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a list of objects which list the Change object with a given GUID as an association.

GET /changes/<GUID>/whereAssociated

```
{
  "Count": 3,
  "Results": [
    {
      "ObjectType": "Change",
      "Guid": "100100000N0000009"
    },
    {

```

```
    "ObjectType": "Item",  
    "Guid": "10000000WL0000XXY"  
  },  
  {  
    "ObjectType": "Item",  
    "Guid": "10000000W80000XKA"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Change Email History

/changes/<GUID>/emailHistory

Returns the Email History of a Quality/CAPA object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Change object with a given GUID.

GET /changes/<GUID>/emailHistory

```
{
  "Count": 1,
  "Results": [
    {
      "Action": "New Change",
      "SentOn": "2021-02-23T05:45:27Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",

```

```
        "FullName": "Kristin Michaels"
      },
      "Subject": "New Change/ECO - ECO-00081",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "sbenjamin@arenasolutions.com;averducci@arenasolutions.com",
      "Contents": "A new Change/ECO has been created that requires your review
or signoff.<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Change/Object.aspx"
      }
    ]
  }
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change View History

/changes/<GUID>/viewingHistory

Returns the viewing history of a Change object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a list of users who viewed a Change object with a given GUID is used.

GET /changes/<GUID>/viewingHistory

```
{
  "Count": 20,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
      },
    },
  ],
}
```

```
    "Workstation": "68.234.198.377",
    "DateTime": "2021-05-03T22:09:00Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000U000000M",
      "FullName": "Barbara McClintock"
    },
    "Workstation": "68.234.198.377",
    "DateTime": "2021-04-01T06:11:00Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000U000000M",
      "FullName": "Barbara McClintock"
    },
    "Workstation": "68.234.198.377",
    "DateTime": "2021-04-01T06:11:00Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change History

/changes/<GUID>/changeHistory

Returns the history of a Change object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the history of a Change object with a given GUID.

GET /changes/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Description Changed",
      "Details": "From: <p>Release new Revision of EveryRoad 2000 for Q3 Release</p><p>Approved by CTO<br></p> to: Nw revisions addresses issues brought by CAR-000025.<br>"
    }
  ]
}
```



```

    "Rev": "",
    "User": {
      "Guid": "185Q00000U000000M",
      "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-04-12T19:06:16Z",
    "Tool": "Desktop"
  },
  {
    "Action": "Description Changed",
    "Details": "From: Release new Revision of EveryRoad 2000 for Q3 Releas<br>
to: <p>Release new Revision of EveryRoad 2000 for Q3 Release</p><p>Approved by
CTO<br></p>",
    "Rev": "",
    "User": {
      "Guid": "185Q00000U000000M",
      "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-04-12T19:04:52Z",
    "Tool": "Desktop"
  },
  {
    "Action": "Description Changed",
    "Details": "From: Release new Revision of EveryRoad 2000 for Q3
Release.<br> to: Release new Revision of EveryRoad 2000 for Q3 Releas<br>",
    "Rev": "",
    "User": {
      "Guid": "185Q00000U000000M",
      "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-04-12T19:04:15Z",
    "Tool": "Desktop"
  },
  ...
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Change Training

/changes/<GUID>/trainings

Returns the objects listed in the Training page of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of the objects listed within the Training page of a Change object with a given GUID.

GET /changes/<GUID>/trainings

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100700000900000CA"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

POST Change Document Upload

/changes/<GUID>/documents

Uploads a document into the Documents page of an Change.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: EveryRoad Diagram
type: Diagram
notes: Review 1/20/21
Keywords: SOP
vault: Public
version: A
file: everyroad_smart_wall_concept.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page within a Change with a given GUID.

POST /changes/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "EveryRoad Diagram",
  "Type": "Diagram",
  "Version": "A",
  "Notes": "Review 1/20/21",
  "Keywords": "Drawing",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "everyroad_smart_wall_concept.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Change Update General

/changes/<GUID>

Updates the General page of a Change with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Change.

```
{
  "Number": "ECO-00005",
  "Type": "ECO",
  "Priority": "High",
  "Description": "Update Product Release Demo for Solidworks saw assembly",
  "Reason": "To demonstrate a product release for a mechanical assembly using Empower with 2021 features."
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Change with a given GUID.

PUT /changes/<GUID>

```
{
  "Guid": "10010000030000004",
  "Number": "ECO-00005",
  "Type": "ECO",
  "Priority": "High",
  "Description": "Update Product Release Demo for Solidworks saw assembly",
  "Reason": "To demonstrate a product release for a mechanical assembly using Empower with 2021 features.",
  "SignoffStatus": "Pending",
  "CustomFields": [
    {
      "Name": "Stop Ship Required",
      "Value": "No"
    },
    {
      "Name": "Product Recall Required",
      "Value": "No"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Change Update Attributes

/changes/<GUID>/attributes

Updates the Attributes page of a Change with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Change.

```
[
  {
    "Name": "Affects SmartHome Project",
    "Value": "REF-00002",
  },
  {
    "Name": "Change Cost > 5",
    "Value": "No"
  },
  {
    "Name": "Market",
    "Value": "North America"
  },
  ...
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|--------|----------------------------------|
| Content-Length | number | number of characters in response |

| Name | Value | Description |
|--------------|---------------------------------|---|
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of an Change with a given GUID.

PUT /changes/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Altium Library Reference",
      "Value": "REF-00002",
    },
    {
      "Name": "Audit Frequency",
      "Value": "Quarterly"
    },
    {
      "Name": "Build/Buy",
      "Value": "Build"
    },
    ...
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO General Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/generalChanges

Returns the general changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the General changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/generalChanges

```
{
  "GeneralFields": [
    {
      "Guid": "186600003M0000008",
      "Change": "Change",
      "FieldName": "Description",
      "OldValue": "",
      "NewValue": "test desc"
    }
  ]
}
```

```

    },
    {
      "Guid": "186600003K000000P",
      "Change": "Change",
      "FieldName": "Type",
      "OldValue": "",
      "NewValue": "Electrical Part"
    },
    {
      "Guid": "186600003L000000Y",
      "Change": "Change",
      "FieldName": "Category",
      "OldValue": "",
      "NewValue": "Brackets"
    },
    {
      "Change": "None",
      "FieldName": "Image",
      "OldValue": ""
    }
  ],
  "BusinessUnits": [
    {
      "Guid": "186600003N000000H",
      "Change": "Add",
      "BusinessUnit": "Canada Engineering"
    }
  ],
  "Projects": [
    {
      "Guid": "186600003O000000Q",
      "Change": "Add",
      "Project": {
        "Guid": "1002000008000000N"
      }
    }
  ],
  "SubstituteParts": [
    {
      "Guid": "186600003P0000000",
      "Change": "Add",
      "SubstitutePart": {
        "Guid": "100000000VH000000N"
      }
    }
  ]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,

```

```
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
  }
]
}
```

GET Change/ECO Attributes Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/attributeChanges

Returns the attribute changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the attribute changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/attributeChanges

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "186A00000C0000003",
      "Change": "Change",
      "FieldName": "Altium Footprint Reference",
      "OldValue": "21321",

```

```
        "NewValue": ""
      },
      {
        "Change": "None",
        "FieldName": "Audit Object",
        "OldValue": "No"
      },
      {
        "Guid": "186A00000D000000C",
        "Change": "Change",
        "FieldName": "Build / Buy",
        "OldValue": "",
        "NewValue": "Buy"
      }
    ]
  }
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO BOM Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/bomChanges

Returns the bom changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the bom changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/bomChanges

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "186B0000DS0000002",
      "Change": "Change",
      "ItemNumber": {
        "OldValue": 1,
```

```

        "NewValue": 1
    },
    "Item": {
        "OldValue": {
            "Guid": "10000000VI0000WQ0"
        },
        "NewValue": {
            "Guid": "10000000VI0000WQ0"
        }
    },
    "Qty": {
        "OldValue": "1",
        "NewValue": "5"
    },
    "UOM": {
        "OldValue": "EA",
        "NewValue": "EA"
    },
    "Refdes": {
        "OldValue": "",
        "NewValue": "A1-A5"
    },
    "Find": {
        "OldValue": "",
        "NewValue": "1001"
    },
    "Alternates": {
        "OldValue": "",
        "NewValue": ""
    },
    "Special": {
        "OldValue": "",
        "NewValue": ""
    },
    "Notes": {
        "OldValue": "",
        "NewValue": ""
    },
    "CustomFields": [
        {
            "Name": "Scrap Percentage (%)",
            "OldValue": "",
            "NewValue": ""
        }
    ]
},
{
    "Guid": "186B0000DR000000S",
    "Change": "Remove",
    "ItemNumber": 4,
    "Item": {
        "Guid": "10000000VP0000X2T"
    },
    "Qty": "1",
    "UOM": "EA",

```



```
    "Refdes": "",
    "Find": "",
    "Alternates": "",
    "Special": "",
    "Notes": "",
    "CustomFields": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ]
  },
  {
    "Guid": "186B0000DQ000000J",
    "Change": "Add",
    "ItemNumber": 5,
    "Item": {
      "Guid": "10000000VD0000WHE"
    },
    "Qty": "1",
    "UOM": "EA",
    "Refdes": "",
    "Find": "",
    "Alternates": "",
    "Special": "",
    "Notes": "",
    "CustomFields": [
      {
        "Name": "Scrap Percentage (%)",
        "Value": ""
      }
    ]
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Routing Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/routingChanges

Returns the routing changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the routing changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/routingChanges

```
{
  "Count": 1,
  "Results": [
    {
      "OperationGuid": "186E00000I000000N",
      "Change": "None",
      "Operation": "Operation-1",
      "Description": ""
    }
  ]
}
```

```

"CustomFields": [],
"Sequences": [
  {
    "Change": "None",
    "Name": "Sequence-1",
    "Description": "1",
    "MachineName": 2.0,
    "QueueTime": 3.0000,
    "SetupTime": 4.0000,
    "MachineTime": 5.0000,
    "LaborTime": 6.0000,
    "MoveTime": 7.0000,
    "VariableTime": 8.0000,
    "CustomFields": []
  },
  {
    "Guid": "186J000002000000T",
    "Change": "Add",
    "Name": "Sequence-2",
    "Description": "2",
    "MachineName": 2.0,
    "QueueTime": 2.0000,
    "SetupTime": 2.0000,
    "MachineTime": 2.0000,
    "LaborTime": 2.0000,
    "MoveTime": 2.0000,
    "VariableTime": 2.0000,
    "CustomFields": []
  }
],
"BOMItems": [
  {
    "Guid": "186K000003000000C",
    "Change": "Add",
    "Item": {
      "Guid": "10000000VI0000WQ0"
    },
    "Qty": "1",
    "Identifier": "",
    "Notes": "",
    "CustomFields": []
  }
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

```
}  
 ]  
}
```

GET Change/ECO Service Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/serviceChanges

Returns the Service changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Service changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/serviceChanges

```
{
  "Count": 2,
  "Results": [
    {
      "Change": "None",
      "ServiceObject": {
        "Guid": "1006000003000000E"
      }
    }
  ]
}
```

```
    },
    {
      "Guid": "186D000003000000J",
      "Change": "Remove",
      "ServiceObject": {
        "Guid": "1006000005000000W"
      }
    }
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Change/ECO Vendor Item Changes

/changes/<GUID>/itemChanges/<GUID-affectedItems>/vendorChanges

Returns the Vendor Item Vendor changes of a Change/ECO with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Vendor Item changes of a Change/ECO with a given GUID.

GET /changes/<GUID>/itemChanges/<GUID-affectedItems>/vendorChanges

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "186C00000N000000F",
      "Change": "Remove",
      "VendorItem": {
        "Guid": "10050000LF000000F"
      }
    }
  ]
}
```

```
    },
    "CustomFields": []
  },
  {
    "Guid": "186C000000000000",
    "Change": "Add",
    "VendorItem": {
      "Guid": "10050000LW000000S"
    },
    "Notes": "",
    "CustomFields": []
  },
  {
    "Change": "None",
    "VendorItem": {
      "Guid": "10050000LE0000006"
    },
    "Notes": "",
    "CustomFields": []
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Quality (Search)

/quality

Returns a collection of Quality objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|-------------------------------------|--------|---|
| Number | string | The number of the Quality/CAPA. Can be found within the General page of the Quality object. |
| Type | string | The Type of the Quality object. Listed in the General page of the Quality object. |
| Status | string | The status of the Quality object. |
| Priority | string | Search by the priority of the Quality object. |
| Description | string | The Description field of the Quality. |
| Reason | string | The Reason why the Quality was raised. |
| Owner | string | The user assigned as the owner of the Quality Object. |
| Due Date | string | The Due Date of the Quality Object. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| Project | string | Projects assigned to this Quality. |
| Business Unit | string | Business Units assigned to the Quality. |
| [Custom Quality Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Quality Attribute] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| [Custom Material Disposition Field] | string | Search by custom Material Disposition Fields created within Empower Administrator. Use the format: Material Disposition: <Custom Material Disposition Name> |
| Request Info: Requested By | string | The user that created the object. |
| Request Info: Request Date | string | The date that the object was created. |
| Request Info: Release Date | string | The date that the object was released. |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Comment | string | Comments associated with the object. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Request Info: Release Date should be typed as Request%20Info:%20Release%20Date.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Quality objects. If there are more than 20, display the second group of 20. Display the Quality object fields of Number, Status, Description, and Type. Sort the results in descending Quality Number.

GET

/quality?Offset=1&Limit=20&Fields=Number,Status,Description,Type&Sort=Number&Order=DESC

```
{
  "Count": 20,
  "Results": [
    {
      "Guid": "1004000005000000E",
      "Number": "SCAR-00001",
      "Status": "Pending",
      "Description": "Supplier issue with defective Processors",
      "Type": "SCAR"
    },
    {
      "Guid": "100400000D000000G",
      "Number": "NCOMR-00003D",
      "Status": "Released",
      "Description": "Materials damaged during shipping",
      "Type": "NCOMR"
    }
  ],
}
```

```

    {
      "Guid": "1004000003000000V",
      "Number": "NCRM-00002",
      "Status": "Released",
      "Description": "Unacceptable rate for Paint damage on chassis for Part
Number 01-0009-00",
      "Type": "NCRM"
    },
    {
      "Guid": "1004000001000000D",
      "Number": "NCRM-00001",
      "Status": "Pending",
      "Description": "Materials damaged during shipping",
      "Type": "NCRM"
    },
    {
      "Guid": "10040000080000006",
      "Number": "FMEA-00001",
      "Status": "Pending",
      "Description": "Failure Mode and analysis of Oxygen Pump",
      "Type": "FMEA"
    },
    {
      "Guid": "1004000007000000W",
      "Number": "CMPL-00001",
      "Status": "Pending",
      "Description": "Customer installation is ambiguous. User manual needs
to be updated",
      "Type": "Complaint"
    },
    {
      "Guid": "100400000L000000I",
      "Number": "CAPA-00011",
      "Status": "Released",
      "Description": "test",
      "Type": "Corrective Action"
    },
    {
      "Guid": "100400000K0000009",
      "Number": "CAPA-00010",
      "Status": "Pending",
      "Description": "Unusual Pump flow rates encountered in many customer end
units.",
      "Type": "Corrective Action"
    },
    ...
  ]
}

```

Get all Quality with a Pending Status, Corrective Action Type, and have a Priority value of High.

GET /quality?Type=Corrective Action&Priority=High&Status=Pending

```

{
  "Count": 2,

```

```
"Results": [
  {
    "Guid": "1004000000000000A",
    "Number": "00-0002-00",
    "Type": "Corrective Action",
    "Priority": "High",
    "Reason": "Burring on the 175-00001 boards was causing the logic chip at
    U1 to be out of height tolerance.",
    "Description": "Manufacturing Flaw on Model 200 Boards",
    "Status": "Pending"
  },
  {
    "Guid": "100400000P0000000J",
    "Number": "00-0003-00",
    "Type": "Corrective Action",
    "Priority": "High",
    "Reason": "Products have been melting in high temp environments in AZ,
    Southern CA, and TX.",
    "Description": "SmartWall bezels melted and sometimes burned.",
    "Status": "Pending"
  }
]
}
```

Get all Quality objects that have a due date of 2021-05-15.

GET /quality?Due Date=2021-05-15

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100400000P0000000J",
      "Number": "00-0003-00",
      "Type": "Corrective Action",
      "Priority": "High",
      "Reason": "Products have been melting in high temp environments in AZ,
      Southern CA, and TX.",
      "Description": "SmartWall bezels melted and sometimes burned.",
      "Status": "Pending",
      "Due Date": "2021-05-15"
    }
  ]
}
```

GET Quality General

/quality/<GUID>

Returns the information within the General page of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the General page of a Quality object with a given GUID.

GET /quality/<GUID>

```
{
  "Guid": "100400000N0000001",
  "Number": "00-0001-00",
  "Type": "FMEA",
  "Priority": "Low",
  "Description": "Reviewing issue with Model 200 Boards",
  "Reason": "Burring on the 175-00001 boards was causing the logic chip at U1 to be out of height tolerance.",
}
```

```
"SignoffStatus": "Pending",
"RaisedBy": {
  "Guid": "185Q000013000000V"
},
"RaisedOn": "2021-02-10T00:00:00Z",
"CustomFields": [
  {
    "Name": "Date Code Related",
    "Value": ""
  },
  {
    "Name": "ECO Required",
    "Value": ""
  },
  {
    "Name": "Long Term Solution",
    "Value": ""
  },
  {
    "Name": "Root Cause",
    "Value": ""
  },
  {
    "Name": "Root Cause Long Description",
    "Value": ""
  },
  {
    "Name": "Short Term Solution",
    "Value": ""
  },
  {
    "Name": "Supplier Name",
    "Value": ""
  },
  {
    "Name": "Supplier Re-qualification Needed",
    "Value": ""
  },
  {
    "Name": "Training Required",
    "Value": ""
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

```
]
}
```


POST Quality/CAPA Object Creation

/quality

Creates a Quality/CAPA object.

In order to create with default projects or default business units, set Projects and BusinessUnits to null in the request body.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a Quality/CAPA object in Empower.

```
{
  "Type": "NCMR",
  "Owner": {
    "Guid": "185Q00000T000000D"
  },
  "Priority": "High",
  "DueDate": "2021-10-31",
  "Description": "Unit 5000 is overheating.",
  "Reason": "Additional cooling fans need to be installed.",
  "IsDraft": "true",
  "TaskTemplate": "8D Template Procedure",
  "Projects": ["FMEA-00003"],
  "BusinessUnits": [],
  "CustomFields": [
    {
      "Name": "Date Code Related",
      "Value": "Test value of Date Code Related"
    },
    {
      "Name": "ECO Required",
      "Value": "Yes"
    },
    {
      "Name": "Long Term Solution",
      "Value": "Test value of Long Term Solution"
    }
  ]
}
```

```

        "Name": "Root Cause",
        "Value": "Supplier Defect"
    },
    {
        "Name": "Root Cause Long Description",
        "Value": "Test value of Root Cause Long Description"
    },
    {
        "Name": "Short Term Solution",
        "Value": "Test value of Short Term Solution"
    },
    {
        "Name": "Supplier Name",
        "Value": "Test value of Supplier Name"
    },
    {
        "Name": "Supplier Re-qualification Needed",
        "Value": "No"
    },
    {
        "Name": "Training Required",
        "Value": "Yes"
    }
],
"Attributes": [
    {
        "Name": "Containment Date",
        "Value": "2021-08-31"
    },
    {
        "Name": "Risk Assessment",
        "Value": "Test value of Attribute: Risk Assessment"
    }
]
}
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |

| Name | Value | Description |
|--------|------------------------|---|
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a Quality/CAPA object in Empower with a unique GUID.

POST /quality

```
{
  "Guid": "100400000S000000B",
  "Number": "NCMR-00008",
  "Type": "NCMR",
  "Owner": {
    "Guid": "185Q00000T000000D"
  },
  "Priority": "High",
  "DueDate": "2021-10-31 00:00:00",
  "Description": "Unit 5000 is overheating.",
  "Reason": "Additional cooling fans need to be installed.",
  "SignoffStatus": "Draft",
  "RaisedBy": {
    "Guid": "185Q0000140000005"
  },
  "RaisedOn": "2021-09-08 00:00:00",
  "CustomFields": [
    {
      "Name": "Date Code Related",
      "Value": "Test value of Date Code Related"
    },
    {
      "Name": "Long Term Solution",
      "Value": "Test value of Long Term Solution"
    },
    {
      "Name": "Root Cause",
      "Value": "Supplier Defect"
    },
    {
      "Name": "Short Term Solution",
      "Value": "Test value of Short Term Solution"
    },
    {
      "Name": "Supplier Name",
      "Value": "Test value of Supplier Name"
    },
    {
      "Name": "Supplier Re-qualification Needed",
      "Value": "No"
    },
    {
      "Name": "Training Required",
```

```
    "Value": "Yes"  
  }  
]  
}
```

POST Adding Affected Objects to a Quality/CAPA

/quality/<GUID>/affectedItems

Adds affected Items to an existing Quality/CAPA object.

Although the endpoint uses the term "affectedItems", the endpoint supports the addition of the following objects: Items, Projects, Vendor, Vendor Item, Service Object, or BOM Routing..

The BOM Routing GUID can be retrieved through [GET BOM Routing GUID](#)

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a Quality/CAPA object in Empower.

```
{
  "Item": {
    "Guid": "10000000XA0001036"
  },
  "Notes": "Suggested Cooling fans",
  "Qty": "10",
  "Reference": "A1",
  "CustomFields": [
    {
      "Name": "Defect Classification",
      "Value": "Gamma"
    }
  ],
  "DispositionFields": [
    {
      "Name": "Field Units",
      "Value": "Return"
    },
    {
      "Name": "In-Process Units",
      "Value": "Rework"
    },
    {
      "Name": "On Order Materials/Units",
      "Value": "Recall"
    }
  ]
}
```

```

    },
    {
      "Name": "Stock Units",
      "Value": "Non-Applicable"
    }
  ]
}
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Adds an object to a Quality/CAPA object in Empower.

POST /quality/<GUID>/affectedItems

```

{
  "Item": {
    "Guid": "10000000XA0001036"
  },
  "Notes": "Suggested Cooling fans",
  "Qty": "10",
  "Reference": "A1",
  "CustomFields": [
    {
      "Name": "Defect Classification",
      "Value": "Gamma"
    }
  ],
  "DispositionFields": [
    {
      "Name": "Field Units",
      "Value": "Return"
    },
    {
      "Name": "In-Process Units",
    }
  ]
}
    
```

```
    "Value": "Rework"  
  },  
  {  
    "Name": "On Order Materials/Units",  
    "Value": "Recall"  
  },  
  {  
    "Name": "Stock Units",  
    "Value": "Non-Applicable"  
  }  
]  
}
```

GET Quality Attributes

/quality/<GUID>/attributes

Returns the attributes of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the attributes of a Quality object with a given GUID.

GET /quality/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Containment Date",
      "Value": "2020-01-01"
    },
    {

```



```
    "Name": "Discrepancy",  
    "Value": "None"  
  },  
  {  
    "Name": "Risk Assessment",  
    "Value": "Low risk: Change to metadata only."  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Quality Business Units

/quality/<GUID>/businessUnits

Returns the business units of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the business units of a Quality object with a given GUID.

GET /quality/<GUID>/businessUnits

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Canada Engineering"
    },
    {
      "Name": "China Manufacturing"
    }
  ]
}
```

```
    },  
    {  
      "Name": "UK Research"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Quality Projects

/quality/<GUID>/projects

Returns the projects of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the projects of a Quality object with a given GUID.

GET /quality/<GUID>/projects

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "1002000007000000E",
      "Name": "FMEA-00002A",
      "Description": "Define team for Oxygen Pump FMEA Analysis"
    }
  ],
}
```

```
{
  "Guid": "1002000003000000D",
  "Name": "MEP-00001",
  "Description": "Next Generation Portable Oxygen Pump Mechanical Packaging
Development"
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Affected Items

/quality/<GUID>/affectedItems

Returns the affected Items of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the affected Items of a Quality object with a given GUID.

GET /quality/<GUID>/affectedItems

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186100000M000000C",
      "Item": {
        "ObjectType": "Item",
        "Guid": "10000000XG00010C1"
      }
    }
  ]
}
```

```
    },
    "Notes": "notes",
    "Qty": "1",
    "Reference": "none",
    "CustomFields": [
      {
        "Name": "Defect Classification",
        "Value": "abc"
      }
    ],
    "DispositionFields": [
      {
        "Name": "Field Units",
        "Value": "Return"
      },
      {
        "Name": "First Article Units",
        "Value": "EA"
      },
      {
        "Name": "In-Process Units",
        "Value": "Rework"
      },
      {
        "Name": "On Order Materials/Units",
        "Value": "Rework"
      },
      {
        "Name": "Stock Units",
        "Value": "Rework"
      }
    ]
  }
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Tasks

/quality/<GUID>/tasks

Returns the tasks of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the tasks of a Quality object with a given GUID.

GET /quality/<GUID>/tasks

```
{
  "Count": 8,
  "Results": [
    {
      "Guid": "1865000001000000Y",
      "Index": 1,
      "TaskName": "Discipline 1. Form the Team",
      "Time": 0.0,
    }
  ]
}
```



```

        "TimeUnit": "",
        "PctComplete": 0.0,
        "Notes": "",
        "Priority": "",
        "ChildTasks": [
            {
                "Guid": "18650000020000008",
                "Index": 2,
                "TaskName": "Assign Team people responsible to tasks and
workflow.",
                "Time": 0.0,
                "TimeUnit": "",
                "PctComplete": 0.0,
                "Notes": "",
                "Priority": "",
                "ChildTasks": [],
                "Resources": [
                    {
                        "Guid": "185Q0000010000006"
                    }
                ],
                "PredecessorIndexes": [],
                "References": [],
                "CustomFields": []
            }
        ],
        "Resources": [],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": []
    },
    {
        "Guid": "18650000030000000H",
        "Index": 3,
        "TaskName": "Discipline 2. Describe the Problem",
        "Time": 0.0,
        "TimeUnit": "",
        "PctComplete": 0.0,
        "Notes": "",
        "Priority": "",
        "ChildTasks": [
            {
                "Guid": "1865000004000000Q",
                "Index": 4,
                "TaskName": "Enter descrtiption in CAPA",
                "Time": 0.0,
                "TimeUnit": "Day",
                "PctComplete": 0.0,
                "Notes": "",
                "Priority": "",
                "ChildTasks": [],
                "Resources": [
                    {
                        "Guid": "185Q0000010000006"
                    }
                ]
            }
        ]
    }
}

```

```
    ],  
    "PredecessorIndexes": [],  
    "References": [],  
    "CustomFields": []  
  },  
  ...  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Quality Documents

/quality/<GUID>/documents

Returns the documents of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the documents of a Quality object with a given GUID.

GET /quality/<GUID>/documents

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "186H00000D0000005",
      "Title": "SmartHome Administrative Panel",
      "Type": "Datashet",
      "Version": "A",
    }
  ]
}
```

```
    "Notes": "Notes 111",
    "Keywords": "Keywords 1111",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "01E-0001 SOP Systems Access.pdf"
  },
  {
    "Guid": "186H00000C000000V",
    "Title": "SOP, Coding Standards",
    "Type": "Datasheet",
    "Version": "1",
    "Notes": "doc notes",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "SOP, Coding Standards.docx"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Documents Content

/quality/<GUID>/documents/<GUID>/content

Returns the content of a documents with a given GUID of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /quality/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Quality Roles

/quality/<GUID>/roles

Returns the roles of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the roles and GUIDs of the users of a Quality object with a given GUID.

GET /quality/<GUID>/roles

```
{
  "Count": 3,
  "Results": [
    {
      "Role": "Assessment Team",
      "Users": [
        {
          "Guid": "185Q000006000000G"
        }
      ]
    }
  ]
}
```

```
    }
  ]
},
{
  "Role": "Process Owner",
  "Users": [
    {
      "Guid": "185Q00000F000000R"
    }
  ]
},
{
  "Role": "Team Leader",
  "Users": [
    {
      "Guid": "185Q00000U000000M"
    }
  ]
}
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Quality Comments

/quality/<GUID>/comments

Returns the comments of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the comments of a Quality object with a given GUID.

GET /quality/<GUID>/comments

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "185T000008000000Q",
      "Creator": {
        "Guid": "185Q00000U000000M"
      }
    },
  ],
}
```

```
    "Type": "General Comments",
    "CommentText": "Please complete future risk assessment before signing
off on this issue.",
    "IsSolution": false,
    "CreatedOn": "2021-03-10T20:28:04Z"
  },
  {
    "Guid": "185T000007000000H",
    "Creator": {
      "Guid": "185Q000013000000V"
    },
    "Type": "Approval Comment",
    "CommentText": "Please Notify our Marketing team of this development.",
    "IsSolution": false,
    "CreatedOn": "2021-02-10T03:46:28Z"
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Associations

/quality/<GUID>/associations

Returns the associations of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the associations of a Quality object with a given GUID.

GET /quality/<GUID>/associations

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185U00007M0000000",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000XG00010C1"
      }
    }
  ]
}
```

```
}  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Quality Where Associated

/quality/<GUID>/whereAssociated

Returns the objects where a Quality object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a list of objects where a Quality object with a given GUID is used.

GET /quality/<GUID>/whereAssociated

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Change",
      "Guid": "10010000250000001"
    }
  ]
}
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Email History

/quality/<GUID>/emailHistory

Returns the Email History of a Quality/CAPA object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Quality/CAPA object with a given GUID.

GET /quality/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Quality Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "Quality Released: CAPA-00009",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "CAPA-00009 is released.<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Quality...\"
    },
    {
      "Action": "Quality Awaiting Release",
      "SentOn": "2021-04-01T01:40:57Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "CAPA-00009",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "CAPA-00009 for API testing<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Quality/...\"
    },
    {
      "Action": "Item Rejected",
      "SentOn": "2021-04-01T01:40:29Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "Quality Rejected - CAPA-00009",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "CAPA-00009 for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/><br/><br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Quality/...\"
    },
    ...
  ]
}

```

Request with bad GUID

```

{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```


GET Quality View History

/quality/<GUID>/viewingHistory

Returns the viewing history of a Quality object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a list of users who viewed a Quality object with a given GUID is used.

GET /quality/<GUID>/viewingHistory

```
{
  "Count": 17,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    },
    ...
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Change History

/quality/<GUID>/changeHistory

Returns the modification history of a Quality object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a history of modifications to a Quality object with a given GUID.

GET /quality/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Comment Added",
      "Details": "User: Barbara McClintock",
      "Rev": "",
      "User": {
```

```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:28:04Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Team Leader, User(s) Added",
    "Details": "Barbara McClintock",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:17:00Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Process Owner, User(s) Added",
    "Details": "Georgia O'Keefe",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:16:49Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Assessment Team, User(s) Added",
    "Details": "Claude Monet",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    }
},
...
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Quality Training

/quality/<GUID>/trainings

Returns the objects listed in the Training page of a Quality object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of the objects listed within the Training page of a Quality object with a given GUID.

GET /quality/<GUID>/trainings

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "1007000005000006P"
    },
    {
      "Guid": "100700000900000CA"
    }
  ]
}
```

```
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

POST Quality Document Upload

/quality/<GUID>/documents

Uploads a document into the Documents page of an Quality/CAPA.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: Burnt Bezels On Smart Chair
type: Screenshot
notes: Review 1/20/21
Keywords: CAR
vault: Public
version: A
file: front_bezels_burned_smart_chair.png
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page within a Quality/CAPA with a given GUID.

POST /quality/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "Burnt Bezels On Smart Chair",
  "Type": "Screenshot",
  "Version": "A",
  "Notes": "Review 1/20/21",
  "Keywords": "CAR",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "front_bezels_burned_smart_chair.png"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


PUT Quality Update General

/quality/<GUID>

Updates the General page of a Quality with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Quality/CAPA.

```
{
  "Number": "CAPA-00018",
  "Type": "Corrective Action",
  "Priority": "Normal",
  "Description": "Chassis Shrinking in SmartLamp",
  "Reason": "Ventilation system not vetted by designer."
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Quality with a given GUID.

PUT /quality/<GUID>

```
{
  "Number": "CAPA-00018",
  "Type": "Corrective Action",
  "Priority": "Normal",
  "Description": "Chassis Shrinking in SmartLamp",
  "Reason": "Ventilation system not vetted by designer.",
  "SignoffStatus": "Pending",
  "RaisedBy": {
    "Guid": "185Q000013000000V"
  },
  "RaisedOn": "2021-02-10T00:00:00Z",
  "CustomFields": [
    {
      "Name": "Date Code Related",
      "Value": ""
    },
    {
      "Name": "ECO Required",
      "Value": ""
    },
    {
      "Name": "Long Term Solution",
      "Value": ""
    },
    {
      "Name": "Root Cause",
      "Value": ""
    },
    {
      "Name": "Root Cause Long Description",
      "Value": ""
    },
    {
      "Name": "Short Term Solution",
      "Value": ""
    },
    {
      "Name": "Supplier Name",
      "Value": ""
    },
    {
      "Name": "Supplier Re-qualification Needed",
      "Value": ""
    },
    {
      "Name": "Training Required",
      "Value": ""
    }
  ]
}
```

```
]
}
```

request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code":3011,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Quality Update Attributes

/quality/<GUID>/attributes

Updates the Attributes page of a Quality with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of an Quality.

```
[
  {
    "Name": "Containment Date",
    "Value": "2021-04-01"
  },
  {
    "Name": "Discrepancy",
    "Value": "None"
  },
  {
    "Name": "Risk Assessment",
    "Value": "Low"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |

| Name | Value | Description |
|--------|------------------------|---|
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Quality with a given GUID.

PUT /quality/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Containment Date",
      "Value": "2021-04-01"
    },
    {
      "Name": "Discrepancy",
      "Value": "None"
    },
    {
      "Name": "Risk Assessment",
      "Value": "Low"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects (Search)

/projects

Returns a collection of Projects objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|----------------------------|--------|--|
| Project Name | string | The name of the Project as listed in the General page of the Project. |
| Description | string | The Description field of the Project. |
| Status | string | The status of the Project. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| Priority | string | The priority assigned to the Project. |
| Type | string | The Project type. |
| % Complete | string | The percent of the Project completed listed to 2 decimal places. Listed under the Project Summary section within the General page. Example 75.00 |
| Business Unit | string | The Business Unit assigned to the Project. |
| [Custom Project Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Project Attribute] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Created By | string | The user that created the Project. Listed in the Project Summary. |
| Creation Date | string | The date the Project was created. Listed in the Project Summary. |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Comment | string | Comments associated with the object. |

Additional Notes

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Business Unit should be typed as Business%20Unit.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Projects with a Status of In Progress and are in the Active Workflow Stage of Input Phase (Phase Gate).

GET

/projects?Status=In%20Progress&Active%20Workflow%20Stage=Input%20Phase%20(Phase%20Gate)

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1002000004000000M",
      "Project Name": "0NPI-00001",
      "Description": "Demo Project for New Product Introduction",
      "Status": "In Progress",
      "Priority": "",
      "% Complete": "10.71",
      "Active Workflow Stage": "Input Phase (Phase Gate)"
    },
    {
      "Guid": "10020000060000005",
      "Project Name": "0NPI-00002",
      "Description": "Demo Project for New Product Introduction",
      "Status": "In Progress",
      "Priority": "",
      "% Complete": null,
      "Active Workflow Stage": "Input Phase (Phase Gate)"
    },
    {
      "Guid": "100200000E0000007",
      "Project Name": "FMEA-00003",
      "Description": "Desc of project - updated April 5",
      "Status": "In Progress",
      "Priority": "Normal",
    }
  ]
}
```



```

        "% Complete": "44.44",
        "Active Workflow Stage": "Input Phase (Phase Gate)"
    }
]
}

```

Get projects that are In Progress and have a value of Yes for the Attribute: 1. Input Phase Complete.

GET

/projects?Attribute:%201.%20Input%20Phase%20Complete=Yes&Status=In%20Progress

```

{
  "Count": 3,
  "Results": [
    {
      "Guid": "1002000004000000M",
      "Project Name": "0NPI-00001",
      "Description": "Demo Project for New Product Introduction",
      "Status": "In Progress",
      "Priority": "",
      "% Complete": "10.71",
      "Attribute: 1. Input Phase Complete": "Yes"
    },
    {
      "Guid": "100200000600000005",
      "Project Name": "0NPI-00002",
      "Description": "Demo Project for New Product Introduction",
      "Status": "In Progress",
      "Priority": "",
      "% Complete": null,
      "Attribute: 1. Input Phase Complete": "Yes"
    },
    {
      "Guid": "100200000E00000007",
      "Project Name": "FMEA-00003",
      "Description": "Desc of project - updated April 5",
      "Status": "In Progress",
      "Priority": "Normal",
      "% Complete": "44.44",
      "Attribute: 1. Input Phase Complete": "Yes"
    }
  ]
}

```

Get all Projects that are 25.00 % Complete..

GET /projects?%%20Complete=25.00

```

{
  "Count": 2,
  "Results": [
    {
      "Guid": "10020000070000000E",
      "Project Name": "FMEA-00002A",
      "Description": "Define team for Oxygen Pump FMEA Analysis",

```

```
    "Status": "Draft",  
    "Priority": "",  
    "% Complete": "25.00"  
  },  
  {  
    "Guid": "1002000008000000N",  
    "Project Name": "FMEA-00002B",  
    "Description": "Define team for Oxygen Pump FMEA Analysis",  
    "Status": "In Progress",  
    "Priority": "Normal",  
    "% Complete": "25.00"  
  }  
]  
}
```

GET Projects General

/projects/<GUID>

Returns information from the General page of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the General page of a Project object with a given GUID.

GET /projects/<GUID>

```
{
  "Guid": "100200000E0000007",
  "Name": "FMEA-00003",
  "Description": "SmartHome FMEA 2021",
  "Type": "FMEA Team Definition",
  "Priority": "Normal",
  "SignoffStatus": "In Progress",
  "PctComplete": 44.44,
```

```
"CreatedBy": {
  "Guid": "185Q0000140000005"
},
"CreatedOn": "2021-02-10T04:10:00Z",
"CustomFields": [
  {
    "Name": "Project Lifecycle",
    "Value": ""
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects Attributes

/projects/<GUID>/attributes

Returns the attributes of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the attributes of a Project object with a given GUID.

GET /projects/<GUID>/attributes

```
{
  "Count": 4,
  "Results": [
    {
      "Name": "1. Input Phase Complete",
      "Value": "In Progress"
    },
    {

```

```
        "Name": "2. Preliminary Design Phase",
        "Value": ""
    },
    {
        "Name": "3. Critical Design Phase",
        "Value": ""
    },
    {
        "Name": "4. Close Out Phase",
        "Value": ""
    }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects Business Units

/projects/<GUID>/businessUnits

Returns the Business Units of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the business units of a Project object with a given GUID.

GET /projects/<GUID>/businessUnits

```
{
  "Count": 2,
  "Results": [
    {
      "Name": "Canada Engineering"
    },
    {
      "Name": "UK Research"
    }
  ]
}
```

```
}  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```


GET Projects Summary

`/projects/<GUID>/summary`

Returns the Project Summary of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Project Summary of a Project object with a given GUID.

GET `/projects/<GUID>/summary`

```
{
  "PctComplete": 44.44,
  "TotalActionTasks": 9,
  "CompletedTasks": 4,
  "TotalHours": 320,
  "CompletedHours": 130
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects Tasks

/projects/<GUID>/tasks

Returns the tasks of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the tasks of a Project object with a given GUID.

GET /projects/<GUID>/tasks

```
{
  "Count": 9,
  "Results": [
    {
      "Guid": "1865000001000000Y",
      "Index": 1,
      "TaskName": "User Needs",
      "Time": 0.0,
    }
  ]
}
```

```
"TimeUnit": "Day",
"PctComplete": 100.0,
"Notes": "",
"Priority": "",
"ChildTasks": [],
"Resources": [
  {
    "Guid": "185Q0000010000006"
  }
],
"PredecessorIndexes": [],
"References": [],
"CustomFields": []
},
{
  "Guid": "18650000020000008",
  "Index": 2,
  "TaskName": "Design Inputs",
  "Time": 0.0,
  "TimeUnit": "Day",
  "PctComplete": 100.0,
  "Notes": "",
  "Priority": "",
  "ChildTasks": [],
  "Resources": [
    {
      "Guid": "185Q000006000000G"
    },
    {
      "Guid": "185Q0000010000006"
    }
  ],
  "PredecessorIndexes": [
    1
  ],
  "References": [],
  "CustomFields": []
},
{
  "Guid": "1865000003000000H",
  "Index": 3,
  "TaskName": "PAC Review",
  "Time": 0.0,
  "TimeUnit": "Day",
  "PctComplete": 100.0,
  "Notes": "",
  "Priority": "",
  "ChildTasks": [],
  "Resources": [
    {
      "Guid": "185Q0000010000006"
    }
  ],
  "PredecessorIndexes": [],
  "References": [],
```

```
        "CustomFields": []  
      },  
      ...  
    ]  
  }
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Projects Roles

/projects/<GUID>/roles

Returns the roles of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the roles of a Project object with a given GUID.

GET /projects/<GUID>/roles

```
{
  "Count": 8,
  "Results": [
    {
      "Role": "Design House",
      "Users": [
        {
          "Guid": "185Q00000U000000M"
        }
      ]
    }
  ]
}
```

```
    },
    {
      "Guid": "185Q00000F000000R"
    }
  ]
},
{
  "Role": "Electrical Engineering",
  "Users": [
    {
      "Guid": "185Q000000000000W"
    },
    {
      "Guid": "185Q00000B000000Q"
    }
  ]
},
{
  "Role": "Manufacturing Engineering",
  "Users": [
    {
      "Guid": "185Q000006000000G"
    },
    {
      "Guid": "185Q00000R000000U"
    }
  ]
},
...
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects Documents

/projects/<GUID>/documents

Returns the documents of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDS of the users associated with roles of a Project object with a given GUID.

GET /projects/<GUID>/documents

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186H0000050000003",
      "Title": "01E-0001 SOP Systems Access",
      "Type": "e-CAD Binary Schematic",
      "Version": "1",
    }
  ]
}
```



```
    "Notes": "notes of doc",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "01E-0001 SOP Systems Access.pdf"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Project Document Content

/projects/<GUID>/documents/<GUID>/content

Returns the content of a document with a given GUID of a Project with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /projects/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Projects Comments

/projects/<GUID>/comments

Returns the comments of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the comments of a Project object with a given GUID.

GET /projects/<GUID>/comments

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T0000020000007",
      "Creator": {
        "Guid": "185Q0000140000005"
      }
    }
  ]
}
```

```
    "Type": "General Comments",
    "CommentText": "Let's get started.",
    "IsSolution": false,
    "CreatedOn": "2021-02-10T04:13:33Z"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Project Assignments

/projects/<GUID>/assignments

Returns the assignments of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the assignments of a Project object with a given GUID.

GET /projects/<GUID>/assignments

```
{
  "Count": 39,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000VD0000WG5"
    },
    {

```

```
    "ObjectType": "Item",
    "Guid": "10000000VD0000WHE"
  },
  {
    "ObjectType": "Item",
    "Guid": "10000000TH0000U72"
  },
  {
    "ObjectType": "Item",
    "Guid": "10000000TR0000UH7"
  },
  {
    "ObjectType": "Item",
    "Guid": "10000000V40000W69"
  },
  {
    "ObjectType": "Change",
    "Guid": "100100001B000000D"
  },
  {
    "ObjectType": "Change",
    "Guid": "10010000250000001"
  },
  {
    "ObjectType": "Change",
    "Guid": "1001000028000000S"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects References

/projects/<GUID>/references

Returns GUIDs from the References page of a Project object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Reference page of a Project object with a given GUID.

GET /projects/<GUID>/references

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Quality",
      "Guid": "1004000009000000F"
    }
  ]
}
```



```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Project Email History

/projects/<GUID>/emailHistory

Returns the Email History of a Project with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Project with a given GUID.

GET /projects/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Project Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]

```

```

    },
    "Subject": "Project Released: FMEA-00009",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "FMEA-00009 is released.<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Project/...\"
    },
    {
      "Action": "Project Awaiting Release",
      "SentOn": "2021-04-01T01:40:57Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "CAPA-00009",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "FMEA-00009 for API testing<br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Project/...\"
    },
    {
      "Action": "Project Rejected",
      "SentOn": "2021-04-01T01:40:29Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "Project Rejected - FMEA-00009",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "FMEA-00009 for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/><br/><br/><br/><a
href=\"http://beta.omnifyonline.com/V750/Apps/Desktop/Project/...\"
    },
    ...
  ]
}

```

Request with bad GUID

```

{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOBOOT0 \" is not valid."
    }
  ]
}

```

GET Project View History

/projects/<GUID>/viewingHistory

Returns the viewing history of a Project object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a list of users who viewed a Project object with a given GUID is used.

GET /quality/<GUID>/viewingHistory

```
{
  "Count": 17,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    },
    ...
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Projects Change History

/projects/<GUID>/changeHistory

Returns the modification history of a Project object with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns a history of modifications to a Project object with a given GUID.

GET /projects/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Comment Added",
      "Details": "User: Barbara McClintock",
      "Rev": "",
      "User": {
```

```

        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:28:04Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Team Leader, User(s) Added",
    "Details": "Barbara McClintock",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:17:00Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Process Owner, User(s) Added",
    "Details": "Georgia O'Keefe",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-10T20:16:49Z",
    "Tool": "Desktop"
},
{
    "Action": "Role: Assessment Team, User(s) Added",
    "Details": "Claude Monet",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    }
},
...
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Projects Trainings

/projects/<GUID>/trainings

Returns the GUIDs of Training objects within the Training page of a Project with a given GUID is associated.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Training objects within the Training page of a Project object with a given GUID.

GET /projects/<GUID>/trainings

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "100700000H00000WH"
    },
    {
      "Guid": "100900000Q00000Z5"
    }
  ]
}
```



```
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

POST Project Document Upload

/projects/<GUID>/documents

Uploads a document into the Documents page of an Project.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: SmartHome Project - Organizational Chart
type: Power Point
notes: Chart
Keywords: Org Chart
vault: Public
version: A
file: smart_home_org_chart.ppt
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page within a Project with a given GUID.

POST /projects/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "SmartHome Project - Organizational Chart",
  "Type": "Power Point",
  "Version": "A",
  "Notes": "Chart",
  "Keywords": "Org Chart",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "smart_home_org_chart.ppt"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Project Update General

/projects/<GUID>

Updates the General page of a Project with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Project.

```
{
  "Guid": "100200000E0000007",
  "Name": "FMEA-00003",
  "Description": "Desc of project - updated April 5",
  "Type": "FMEA Team Definition",
  "Priority": "Normal"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Project with a given GUID.

PUT /projects/<GUID>

```
{
  "Guid": "100200000E0000007",
  "Name": "FMEA-00003",
  "Description": "Desc of project - updated April 5",
  "Type": "FMEA Team Definition",
  "Priority": "Normal",
  "SignoffStatus": "In Progress",
  "PctComplete": 44.44,
  "CreatedBy": {
    "Guid": "185Q0000140000005"
  },
  "CreatedOn": "2021-02-10T04:10:00Z",
  "CustomFields": [
    {
      "Name": "Project Lifecycle",
      "Value": ""
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Project Update Attributes

/projects/<GUID>/attributes

Updates the Attributes page of a Project with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Project.

```
[
  {
    "Name": "1. Input Phase Complete",
    "Value": "Completed"
  },
  {
    "Name": "2. Preliminary Design Phase",
    "Value": "In Progress"
  },
  {
    "Name": "3. Critical Design Phase",
    "Value": ""
  },
  {
    "Name": "4. Close Out Phase",
    "Value": ""
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Project with a given GUID.

PUT /projects/<GUID>/attributes

```
{
  "Count": 4,
  "Results": [
    {
      "Name": "1. Input Phase Complete",
      "Value": "Completed"
    },
    {
      "Name": "2. Preliminary Design Phase",
      "Value": "In Progress"
    },
    {
      "Name": "3. Critical Design Phase",
      "Value": ""
    },
    {
      "Name": "4. Close Out Phase",
      "Value": ""
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items (Search)

/vendorItems

Returns a collection of Vendor Items objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Field | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|----------------------------------|--------|--|
| Part Number | string | The Part Number of the Vendor Item. Can be found within the General page of the Vendor Item. |
| Vendor Name | string | The name of the Vendor that sells or produces the Vendor Item. |
| Description | string | The Description of the Vendor Item. |
| Status | string | The status of the Vendor Item. |
| Vendor Type | string | The Vendor Item type. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| [Custom Vendor Item Attributes] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Comment | string | Comments associated with the object. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Vendor Type should be typed as Vendor%20Type.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get vendor items that have a Part Number of TEST-VI-001. Set the results to position 0 and limit it to 20 results. Sort by Part Number and order the list in Descending order.

```
GET /vendorItems?Offset=0&Limit=20&Sort=Part
Number&Order=DESC&Part%20Number=TEST-VI-001
```

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "10050000M4000000S",
      "Part Number": "TEST-VI-001",
      "Vendor Name": "3M",
      "Description": "Desc of Vendor Item Updated",
      "Status": "Primary"
    }
  ]
}
```

Get Vendor Items from Kemet and contain a Document File Path of Capacitor Datasheet.pdf

```
GET
/vendorItems?Vendor%20Name=Kemet&Document%20File%20Path=Capacitor%20Datasheet.pdf
```

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "10050000LA0000005",
      "Part Number": "765432y665",
      "Vendor Name": "Kemet",
      "Description": "",
      "Status": "Primary",
      "Document File Path": "Capacitor Datasheet.pdf"
    }
  ]
}
```

Get all Vendor Items from Tessier-Ashpool that are in the Active Workflow Stage of Initiator.

GET

`/vendorItems?Vendor%20Name=Tessier-Ashpool&Active%20Workflow%20Stage=Initiator`

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "10050000LU000000A",
      "Part Number": "TA-9654-003",
      "Vendor Name": "Tessier-Ashpool",
      "Description": "",
      "Status": "Primary",
      "Active Workflow Stage": "Initiator"
    },
    {
      "Guid": "10050000LX0000002",
      "Part Number": "TA-9844-23B",
      "Vendor Name": "Tessier-Ashpool",
      "Description": "",
      "Status": "Primary",
      "Active Workflow Stage": "Initiator"
    },
    {
      "Guid": "10050000LY000000B",
      "Part Number": "ZH1K3K3JFSBL4N6O1ZQS",
      "Vendor Name": "Tessier-Ashpool",
      "Description": "Genuine Polaris Part Number 1253372 - ASM-FILTER,AIR,4.0\
LONG for Polaris ATV / Motorcycle / Snowmobile/ or Watercraft Genuine Polaris Part
Number 1253372",
      "Status": "Primary",
      "Active Workflow Stage": "Initiator"
    }
  ]
}
```

GET Vendor Items General

/vendorItems/<GUID>

Returns information from the General page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the General page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>

```
{
  "Guid": "10050000M4000000S",
  "Vendor": {
    "Guid": "1003000000000000U"
  },
  "PartNumber": "294-VI-001",
  "Description": "RES 39K-RC",
  "Status": "Primary",
```

```
"SignoffStatus": "Pending",
"CreatedBy": {
  "Guid": "185Q0000140000005"
},
"CreatedOn": "2021-02-10T04:18:05Z"
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Attributes

/vendorItems/<GUID>/attributes

Returns information from the Attributes page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the attributes page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/attributes

```
{
  "Count": 14,
  "Results": [
    {
      "Name": "Cadmium",
      "Value": "None Present"
    },
    {

```

```
    "Name": "Height",
    "Value": "10 m"
  },
  {
    "Name": "Hexavalent Chromium",
    "Value": "None Present"
  },
  {
    "Name": "Lead",
    "Value": "None Present"
  },
  {
    "Name": "Lead Free Status",
    "Value": "Confirmed"
  },
  {
    "Name": "Length",
    "Value": ""
  },
  {
    "Name": "Manufacturer Part Lifecycle Status",
    "Value": "5m"
  },
  {
    "Name": "Max Weight",
    "Value": "300kg"
  },
  {
    "Name": "Mercury",
    "Value": ""
  },
  {
    "Name": "Polybrominated Biphenyls",
    "Value": ""
  },
  {
    "Name": "Polybrominated Diphenyl Ethers",
    "Value": ""
  },
  {
    "Name": "REACH SVHC Compliance",
    "Value": ""
  },
  {
    "Name": "RoHS Compliance",
    "Value": ""
  },
  {
    "Name": "Width",
    "Value": ""
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Vendor Items Documents

/vendorItems/<GUID>/documents

Returns information from the Documents page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Documents page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/documents

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "186H000003000000K",
      "Title": "BASF Terluran GP-22 (ABS) Datasheet",
      "Type": "",
      "Version": "1",
    }
  ]
}
```

```
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "",
    "FileNameOrUrl": "BASF Terluran GP-22 (ABS) Datasheet.pdf"
  },
  {
    "Guid": "186H000004000000T",
    "Title": "BASF Terluran GP-78 (ABS) Datasheet",
    "Type": "Datasheet",
    "Version": "V1",
    "Notes": "My Notes",
    "Keywords": "dkkq",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "BASF Terluran GP-78 (ABS) Datasheet.docx"
  },
  {
    "Guid": "186H000006000000C",
    "Title": "Handling Instructions doc",
    "Type": "Datasheet",
    "Version": "V1",
    "Notes": "Transportation notes",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "Terluran Handling Notes.txt"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Document Content

`/vendorItems/<GUID>/documents/<GUID>/content`

Returns the content of a document with a given GUID of a Vendor Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET `/vendorItems/<GUID>/documents/<GUID>/content`

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Vendor Items Supplier Items

/vendorItems/<GUID>/suppliers

Returns Supplier Items information from the Suppliers page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns Supplier Item information from the Supplier page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/suppliers

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "18600000030000007",
      "SupplierItem": {
        "Guid": "10050000LN000000H"
      }
    },
  ],
}
```

```
    "Notes": "",
    "CustomFields": []
  },
  {
    "Guid": "1860000004000000G",
    "SupplierItem": {
      "Guid": "10050000LR000000I"
    },
    "Notes": "",
    "CustomFields": []
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Comments

`/vendorItems/<GUID>/comments`

Returns Comments information from the Comments page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns Comments information from the Comments page of a Vendor Item object with a given GUID.

GET `/vendorItems/<GUID>/comments`

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T000001000000X",
      "Creator": {
        "Guid": "185Q00000140000005"
      }
    }
  ]
}
```

```
    "Type": "Approval Comment",
    "CommentText": "This variant is the preferred choice for the EU market.",

    "IsSolution": false,
    "CreatedOn": "2021-02-23T02:53:14Z"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Vendor Items Where Used

`/vendorItems/<GUID>/whereUsed`

Returns information from the Where Used page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Where Used page of a Vendor Item object with a given GUID.

GET `/vendorItems/<GUID>/whereUsed`

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000XG00010C1"
    }
  ]
}
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Changes

/vendorItems/<GUID>/changes

Returns Change/ECO information from the Changes page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Changes from the Changes page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/changes

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "10010000030000004"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Quality

/vendorItems/<GUID>/quality

Returns Quality information from the Quality page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Quality objects from the Quality page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/changes

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100400000M000000R"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Associations

`/vendorItems/<GUID>/associations`

Returns associations information from the Associations page of a Vendor Item object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the associations information from the Associations page of a Vendor Item object with a given GUID.

GET `/vendorItems/<GUID>/associations`

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "185U00007Y0000003",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000UB0000V3V"
      }
    }
  ]
}
```

```
    }
  },
  {
    "Guid": "185U000080000000J",
    "AssociatedObject": {
      "ObjectType": "Item",
      "Guid": "100000002F00002JM"
    }
  },
  {
    "Guid": "185U000081000000S",
    "AssociatedObject": {
      "ObjectType": "Item",
      "Guid": "100000002H00002LN"
    }
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Vendor Items Where Associated

/vendorItems/<GUID>/whereAssociated

Returns information on objects where this Vendor Item is an association. This information can be found within the Where Associated section of the Associations page of the Vendor Item.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Where Associated section of the Associations page of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/whereAssociated

```
{
  "Count": 4,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "1000000VP0000X2T"
    }
  ]
}
```

```
    },
    {
      "ObjectType": "Item",
      "Guid": "10000000XB0001067"
    },
    {
      "ObjectType": "Quality",
      "Guid": "100400000M000000R"
    },
    {
      "ObjectType": "Change",
      "Guid": "100100000D0000000"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Change History

/vendorItems/<GUID>/changeHistory

Returns the modification history of a Vendor Item of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/changeHistory

```
{
  "Count": 9,
  "Results": [
    {
      "Action": "Supplier Item Added",
      "Details": "ACME_F : ACME-2020-04-10-1000F",
      "Rev": "",
      "User": {
```

```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-11T18:35:48Z",
    "Tool": "Desktop"
},
{
    "Action": "Supplier Item Added",
    "Details": "ACME_B : ACME-2020-04-20-1000_B",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-11T18:35:43Z",
    "Tool": "Desktop"
},
{
    "Action": "Document Added",
    "Details": "DigiKeyDataSheet.txt",
    "Rev": "",
    "User": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Jones"
    },
    "DateTime": "2021-02-23T02:58:30Z",
    "Tool": "API"
},
...
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Viewing History

/vendorItems/<GUID>/viewingHistory

Returns the viewing history of a Vendor Item of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a Vendor Item object with a given GUID.

GET /vendorItems/<GUID>/viewingHistory

```
{
  "Count": 17,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    }
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Items Email History

/vendorItems/<GUID>/emailHistory

Returns the Email History of a Vendor Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Vendor Item with a given GUID.

GET /vendorItems/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Vendor Item Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "Vendor Item Released: 110-FF-C11-000021",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "110-FF-C11-000021 is released.<br/><br/><a
href=\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197/a"
    },
    {
        "Action": "Vendor Item Awaiting Release",
        "SentOn": "2021-04-01T01:40:57Z",
        "SentFrom": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Smith"
        },
        "Subject": "110-FF-C11-000021",
        "Type": "Automatic",
        "Tool": "Empower Mail Services",
        "SentTo": "asmith@everyroadgps.com",
        "Contents": "110-FF-C11-000021 for API testing<br/><br/><a
href=\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197/a"
    },
    {
        "Action": "Vendor Item Rejected",
        "SentOn": "2021-04-01T01:40:29Z",
        "SentFrom": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Smith"
        },
        "Subject": "Vendor Item Rejected - 110-FF-C11-000021",
        "Type": "Automatic",
        "Tool": "Empower Mail Services",
        "SentTo": "asmith@everyroadgps.com",
        "Contents": "110-FF-C11-000021 for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/><br/><br/><br/><a
href=\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197\http://ta.onifonline.com/V50/App/Desktop/VendorItemObject.aspx?id=1197/a"
    },
    ...
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```


POST Vendor Items Document Upload

/vendorItems/<GUID>/documents

Uploads a document into the Documents page of an Vendor Item.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: RoHS Certificate of Compliance
type: Certificate
notes: 2020
Keywords: Compliance
vault: Public
version: A
file: rohs_certificate_of_compliance.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page within a Vendor Item with a given GUID.

POST /vendorItems/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "RoHS Certificate of Compliance",
  "Type": "Certificate",
  "Version": "A",
  "Notes": "2020",
  "Keywords": "Compliance",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "rohs_certificate_of_compliance.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Vendor Item Update General

/vendorItems/<GUID>

Updates the General page of a Vendor Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Vendor Item.

```
{
  "Vendor": {
    "Guid": "1003000000000000U"
  },
  "PartNumber": "TEST-VI-001",
  "Description": "Desc of Vendor Item Updated",
  "Status": "Primary"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Vendor Item with a given GUID.

PUT /vendorItems/<GUID>

```
{
  "Guid": "10050000M4000000S",
  "Vendor": {
    "Guid": "1003000000000000U"
  },
  "PartNumber": "TEST-VI-001",
  "Description": "Desc of Vendor Item Updated",
  "Status": "Primary",
  "SignoffStatus": "Pending",
  "CreatedBy": {
    "Guid": "185Q0000140000005"
  },
  "CreatedOn": "2021-02-10T04:18:05Z"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Vendor Item Update Attributes

/vendorItems/<GUID>/attributes

Updates the Attributes page of a Vendor Item with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Vendor Item.

```
[
  {
    "Name": "Cadmium",
    "Value": "Negative"
  },
  {
    "Name": "Height",
    "Value": "16"
  },
  {
    "Name": "Hexavalent Chromium",
    "Value": "Negative"
  },
  {
    "Name": "Lead",
    "Value": "Negative"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Vendor Item with a given GUID.

PUT /vendorItems/<GUID>/attributes

```
{
  "Count": 14,
  "Results": [
    {
      "Name": "Cadmium",
      "Value": "Negative"
    },
    {
      "Name": "Height",
      "Value": "16"
    },
    {
      "Name": "Hexavalent Chromium",
      "Value": "Negative"
    },
    {
      "Name": "Lead",
      "Value": "Negative"
    },
    {
      "Name": "Lead Free Status",
      "Value": ""
    },
    {
      "Name": "Length",
      "Value": ""
    },
    {
      "Name": "Manufacturer Part Lifecycle Status",
      "Value": ""
    },
    {
      "Name": "Max Weight",
      "Value": ""
    },
    {
      "Name": "Mercury",
```

```
    "Value": ""
  },
  {
    "Name": "Polybrominated Biphenyls",
    "Value": ""
  },
  {
    "Name": "Polybrominated Diphenyl Ethers",
    "Value": ""
  },
  {
    "Name": "REACH SVHC Compliance",
    "Value": ""
  },
  {
    "Name": "RoHS Compliance",
    "Value": ""
  },
  {
    "Name": "Width",
    "Value": ""
  }
]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendors (Search)

/vendors

Returns a collection of Vendor objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|---------------------------|--------|--|
| Vendor Name | string | The name of the Vendor as listed in the General page of the Vendor.stat |
| Type | string | Search by Vendor Type. |
| Status | string | The Vendor status. Example: Preferred or Alternate. |
| Address | string | The address of the Vendor. |
| City | string | The city of the Vendor. |
| State | string | The state of the Vendor. |
| Country | string | The country of the Vendor. |
| Zip | string | The Zip code for the Vendor. |
| Vendor Web Site | string | The corporate website of the Vendor. |
| Comment | string | Comments associated with the object. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| [Custom Vendor Fields] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Vendor Attribute] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Vendor Web Site should be typed as Vendor%20Web%20Site.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all vendors with a Preferred status. Sort by descending Vendor Name Order. If results are more than 20, start at position 0 in the list of results.

GET /vendors?Offset=0&Limit=20&Sort=Vendor%20Name&Order=DESC&Status=Preferred

```
{
  "Count": 20,
  "Results": [
    {
      "Guid": "100300001I0000000",
      "Vendor Name": "Zierick",
      "Status": "Preferred",
      "Type": "Manufacturer",
      "Vendor Web Site": null,
      "Comment": null,
      "Address": null,
      "City": null,
      "State": null,
      "Country": null,
      "Zip": null
    },
    {
      "Guid": "100300001H0000000F",
      "Vendor Name": "Xilinx",
      "Status": "Preferred",
      "Type": "Manufacturer",
      "Vendor Web Site": null,
      "Comment": null,
      "Address": null,
      "City": null,
      "State": null,
      "Country": null,

```

```

        "Zip": null
    },
    {
        "Guid": "100300001B000000V",
        "Vendor Name": "Toshiba",
        "Status": "Preferred",
        "Type": "Manufacturer",
        "Vendor Web Site": null,
        "Comment": null,
        "Address": null,
        "City": null,
        "State": null,
        "Country": null,
        "Zip": null
    },
    {
        "Guid": "100300001V0000001",
        "Vendor Name": "PV2",
        "Status": "Preferred",
        "Type": "Distributor",
        "Vendor Web Site": "",
        "Comment": "",
        "Address": "301 Ballardvale Street",
        "City": "Wilmington",
        "State": "MA",
        "Country": "USA",
        "Zip": "01887"
    },
    ...
]
}

```

Get vendors with a status of Alternate and are in the state of California.

GET /vendors?Status=Alternate&State=CA

```

{
  "Count": 2,
  "Results": [
    {
      "Guid": "1003000015000000C",
      "Vendor Name": "Richco Plastic",
      "Status": "Alternate",
      "Type": "Manufacturer",
      "Vendor Web Site": null,
      "Comment": null,
      "Address": null,
      "City": null,
      "State": "CA",
      "Country": null,
      "Zip": null
    },
    {
      "Guid": "100300001D000000E",

```

```
    "Vendor Name": "Unlimited Contract Manufacturers Inc.",  
    "Status": "Alternate",  
    "Type": "Manufacturer",  
    "Vendor Web Site": null,  
    "Comment": null,  
    "Address": null,  
    "City": null,  
    "State": "CA",  
    "Country": null,  
    "Zip": null  
  }  
]  
}
```

GET Vendors General

/vendors/<GUID>

Returns the information within the General page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the General page of a Vendor object with a given GUID.

GET /vendors/<GUID>

```
{
  "Guid": "10030000010000004",
  "Name": "Acme Manufacturing",
  "Type": "Manufacturer",
  "Status": "Preferred",
  "Address": "301 Ballardvale Street",
  "City": "Wilmington",
  "State": "MA",
```

```
"Country": "USA",
"Zip": "01887",
"Image": "xxxx",
"SignoffStatus": "Released",
"CreatedBy": {
  "Guid": "185Q0000010000006"
},
"CreatedOn": "2014-05-21T17:12:21Z",
"CustomFields": [
  {
    "Name": "Last Audit Date (MM/DD/YYYY)",
    "Value": "12/22/2015"
  },
  {
    "Name": "Audit Frequency (Days Count)",
    "Value": "365"
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendors Attributes

/vendors/<GUID>/attributes

Returns the information within the Attributes page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Attributes page of a Vendor object with a given GUID.

GET /vendors/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Audit Frequency",
      "Value": "10"
    },
    {

```

```
    "Name": "Audit Object",  
    "Value": "SPHD 20AD"  
  },  
  {  
    "Name": "Last Audit Date",  
    "Value": "3/16/2020"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```


GET Vendors Documents

/vendors/<GUID>/documents

Returns the documents within the Documents page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns documents within the Documents page of a Vendor object with a given GUID.

GET /vendors/<GUID>/documents

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "186H000002000000B",
      "Title": "NDA",
      "Type": "Supplier Non-Disclosure Agreement",
      "Version": "1",
    }
  ]
}
```

```
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "NDA.docx"
  },
  {
    "Guid": "186H0000010000002",
    "Title": "Supplier Checklist",
    "Type": "Supplier Qualification Form",
    "Version": "1",
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "Supplier Checklist.xlsx"
  },
  {
    "Guid": "186H000006000000C",
    "Title": "Supplier Price Agreement doc",
    "Type": "Datasheet",
    "Version": "V1",
    "Notes": "test notes",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "SupplierPriceAgreement.txt"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Document Content

`/vendors/<GUID>/documents/<GUID>/content`

Returns the content of a document with a given GUID of a Vendor with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET `/vendors/<GUID>/documents/<GUID>/content`

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Vendor Contacts

/vendors/<GUID>/contacts

Returns Vendor Contacts information of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the contact information of a Vendor object with a given GUID.

GET /vendors/<GUID>/contacts

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1862000002000000G",
      "Name": "Dorothy James",
      "Email": "djames@acme.com",
      "Phone": "(212) 87803421",
    }
  ]
}
```

```
    "Fax": "",
    "CustomFields": []
  },
  {
    "Guid": "18620000010000007",
    "Name": "Fred Smith",
    "Email": "freds@Acme-Manu.com",
    "Phone": "+001 978-999-9999",
    "Fax": "",
    "CustomFields": []
  },
  {
    "Guid": "1862000003000000P",
    "Name": "Kelly Garnett",
    "Email": "kgarnett@acme.com",
    "Phone": "(213) 853-2462",
    "Fax": "",
    "CustomFields": []
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendors Vendor Items

/vendors/<GUID>/vendorItems

Returns Vendor Items listed within the Vendor Items page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Vendor Items listed within the Vendor Items page of a Vendor object with a given GUID.

GET /vendors/<GUID>/vendorItems

```
{
  "Count": 6,
  "Results": [
    {
      "Guid": "10050000L7000000D"
    },
    {
      "Guid": "10050000LT0000001"
    }
  ]
}
```

```
    },
    {
      "Guid": "10050000LF000000F"
    },
    {
      "Guid": "10050000LG0000000"
    },
    {
      "Guid": "10050000LW000000S"
    },
    {
      "Guid": "10050000L8000000M"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Vendors Where Used By Items

/vendors/<GUID>/whereUsedByItems

Returns information within the Items/Parts/BOMs section within the Where Used page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Items and Vendor Items listed within the Items/Parts/BOMs section of the Where Used page of a Vendor object with a given GUID.

GET /vendors/<GUID>/whereUsedByItems

```
{
  "Count": 14,
  "Results": [
    {
      "Item": {
        "Guid": "10000000XG00010C1"
      }
    }
  ]
}
```

```
    },
    "VendorItem": {
      "Guid": "10050000L7000000D"
    }
  },
  {
    "Item": {
      "Guid": "10000000XG00010C1"
    },
    "VendorItem": {
      "Guid": "10050000LT0000001"
    }
  },
  {
    "Item": {
      "Guid": "1000000009000000DQ"
    },
    "VendorItem": {
      "Guid": "10050000L8000000M"
    }
  },
  ...
}
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendors Where Used By Supplier Items

/vendors/<GUID>/whereUsedBySupplierItems

Returns information within the Supplier Items section within the Where Used page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of the Vendor Items listed within the Supplier Items section of the Where Used page of a Vendor object with a given GUID.

GET /vendors/<GUID>/whereUsedByItems

```
{
  "Count": 1,
  "Results": [
    {
      "VendorItem": {
        "Guid": "10050000LD000000W"
      }
    }
  ]
}
```

```
    },
    "SupplierItem": {
      "Guid": "10050000L7000000D"
    }
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendors Quality

/vendors/<GUID>/quality

Returns Quality information from the Quality page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Quality objects from the Quality page of a Vendor object with a given GUID.

GET /vendors/<GUID>/quality

```
{
  "Count": 2,
  "Results": [
    {
      "ObjectType": "Quality",
      "Guid": "1004000006000000N"
    },
    {

```

```
      "ObjectType": "Quality",  
      "Guid": "1004000003000000V"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Vendors Associations

/vendors/<GUID>/associations

Returns associations information from the Associations page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the associations information from the Associations page of a Vendor object with a given GUID.

GET /vendors/<GUID>/associations

```
{
  "Count": 6,
  "Results": [
    {
      "Guid": "185U000040000000W",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000T20000TQV"
      }
    }
  ]
}
```

```
    }
  },
  {
    "Guid": "185U00004P00000006",
    "AssociatedObject": {
      "ObjectType": "Change",
      "Guid": "100100000300000004"
    }
  },
  {
    "Guid": "185U00004Q0000000F",
    "AssociatedObject": {
      "ObjectType": "Project",
      "Guid": "10020000040000000M"
    }
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Vendors Where Associated

/vendors/<GUID>/whereAssociated

Returns associations information from the Where Associated section of the Associations page of a Vendor object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns association information from the Where Associated section of the Associations page of a Vendor object with a given GUID.

GET /vendors/<GUID>/whereAssociated

```
{
  "Count": 2,
  "Results": [
    {
      "ObjectType": "Change",
      "Guid": "100100000N0000009"
    }
  ]
}
```

```
    },  
    {  
      "ObjectType": "VendorItem",  
      "Guid": "100500001M00000008"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Vendor Change History

/vendors/<GUID>/changeHistory

Returns the modification history of a Vendor of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a Vendor object with a given GUID.

GET /vendors/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Contact Added",
      "Details": "Dorothy James",
      "Rev": "",
      "User": {
```

```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-11T23:33:43Z",
    "Tool": "Desktop"
},
{
    "Action": "Vendor Image Changed",
    "Details": "From: to: xxxx",
    "Rev": "",
    "User": {
        "Guid": "185Q0000140000005",
        "FullName": "Andre Zhang"
    },
    "DateTime": "2021-02-24T02:24:00Z",
    "Tool": "API"
},
{
    "Action": "Vendor Address Changed",
    "Details": "From: to: 301 Ballardvale Street",
    "Rev": "",
    "User": {
        "Guid": "185Q0000010000006",
        "FullName": "Demo AE"
    },
    "DateTime": "2014-06-10T18:25:30Z",
    "Tool": "Desktop"
},
...
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Viewing History

/vendors/<GUID>/viewingHistory

Returns the viewing history of a Vendor of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a Vendor object with a given GUID.

GET /vendors/<GUID>/viewingHistory

```
{
  "Count": 17,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    }
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Vendor Email History

/vendors/<GUID>/emailHistory

Returns the email history of a Vendor with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Vendor with a given GUID.

GET /vendors/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Vendor Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "Vendor Released: Turnkey Electronics",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "Turnkey Electronics is released.<br/><br/><a
href='http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197'>http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197</a>"
  },
  {
    "Action": "Vendor Awaiting Release",
    "SentOn": "2021-04-01T01:40:57Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    },
    "Subject": "Turnkey Electronics",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "Turnkey Electronics for API testing<br/><br/><a
href='http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197'>http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197</a>"
  },
  {
    "Action": "Vendor Rejected",
    "SentOn": "2021-04-01T01:40:29Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    },
    "Subject": "Vendor Rejected - Turnkey Electronics",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "Turnkey Electronics for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/><br/><br/><br/><a
href='http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197'>http://beta.onifyonline.com/V50/Apps/DesktopVendor/Object.aspx?id=1197</a>"
  },
  ...
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```


POST Vendor Document Upload

/vendor/<GUID>/documents

Uploads a document into the Documents page of an Vendor.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: List of DigiKey Contacts
type: Contact List
notes: Updated 2019 Q4
Keywords: Contact List
vault: Public
version: A
file: digikey_contacts.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page of a Vendor with a given GUID.

POST /vendors/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "List of DigiKey Contacts",
  "Type": "Contact List",
  "Version": "A",
  "Notes": "Updated 2019 Q4",
  "Keywords": "Contact List",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "digikey_contacts.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Vendor Update General

/vendors/<GUID>

Updates the General page of a Vendor with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Vendor.

```
{
  "Name": "Acme Manufacturing Inc.",
  "Type": "Manufacturer",
  "Status": "Preferred",
  "Address": "301 Ballardvale Street",
  "City": "Wilmington",
  "State": "MA",
  "Country": "USA",
  "Zip": "01887",
  "Image": "xxxx"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |

| Name | Value | Description |
|--------|------------------------|---|
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Vendor with a given GUID.

PUT /vendors/<GUID>

```
{
  "Guid": "10030000010000004",
  "Name": "Acme Manufacturing Inc.",
  "Type": "Manufacturer",
  "Status": "Preferred",
  "Address": "301 Ballardvale Street",
  "City": "Wilmington",
  "State": "MA",
  "Country": "USA",
  "Zip": "01887",
  "Image": "xxxx",
  "SignoffStatus": "Released",
  "CreatedBy": {
    "Guid": "185Q0000010000006"
  },
  "CreatedOn": "2014-05-21T17:12:21Z",
  "CustomFields": [
    {
      "Name": "Last Audit Date (MM/DD/YYYY)",
      "Value": "12/22/2015"
    },
    {
      "Name": "Audit Frequency (Days Count)",
      "Value": "365"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Vendor Update Attributes

/vendors/<GUID>/attributes

Updates the Attributes page of a Vendor with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Vendor.

```
[
  {
    "Name": "Audit Frequency",
    "Value": "4"
  },
  {
    "Name": "Audit Object",
    "Value": "Yes"
  },
  {
    "Name": "Last Audit Date",
    "Value": "2020-10-17"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |

| Name | Value | Description |
|--------|------------------------|---|
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Vendor with a given GUID.

PUT /vendors/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Audit Frequency",
      "Value": "4"
    },
    {
      "Name": "Audit Object",
      "Value": "Yes"
    },
    {
      "Name": "Last Audit Date",
      "Value": "2020-10-17"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Service Objects (Search)

/serviceObjects

Returns a collection of Service Objects objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|------------------------------------|--------|--|
| Number | string | The number of the Service Object. Can be found within the General page of the Service Object. |
| Type | string | The Service Object type. |
| Description | string | The Description of the Service Object. |
| Active Workflow Stage | string | The current stage of the object in it's Workflow Signoff. |
| [Custom Service Object Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Service Object Attributes] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Active Workflow Stage should be typed as Active%20Workflow%20Stage.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|--------|----------------------------------|
| Content-Length | number | number of characters in response |

| Name | Value | Description |
|--------------|------------------------|---|
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Service Objects

GET /serviceObjects

```
{
  "Count": 20,
  "Results": [
    {
      "Guid": "10000000T20000UTU",
      "Part Number": "00-0001-00",
      "Description": "",
      "Type": "Assembly",
      "Category": "",
      "Lifecycle": "Preliminary",
      "Revision": "1.1"
    },
    {
      "Guid": "10000000UH0000V9Y",
      "Part Number": "00-0001-01",
      "Description": "Test Assy",
      "Type": "Assembly",
      "Category": "PCB Assembly",
      "Lifecycle": "Preliminary",
      "Revision": "1.0"
    },
    {
      "Guid": "10000000T40000UMK",
      "Part Number": "00-0002-00",
      "Description": "",
      "Type": "Assembly",
      "Category": "",
      "Lifecycle": "Preliminary",
      "Revision": "1.1"
    },
    ...
  ]
}
```

Get Service Objects, with a number set to CRIMP-0004. Sort by Service Object number in descending order.

GET /serviceObjects?Offset=0&Limit=20&Sort=Number&Order=DESC&Number=CRIMP-0004

```
{
  "Count": 1,
  "Results": [
```

```
{
  "Guid": "1006000005000000W",
  "Number": "CRIMP-0004",
  "Type": "Tool Number",
  "Description": "test updating notes"
}
]
```

Get Service Objects with a type set to Tool Number..

GET /serviceObjects?Type=Tool%20Number

```
{
  "Count": 4,
  "Results": [
    {
      "Guid": "1006000001000000V",
      "Number": "CRIMP-0001",
      "Type": "Tool Number",
      "Description": "Green handle crimper used for production"
    },
    {
      "Guid": "10060000020000005",
      "Number": "CRIMP-0002",
      "Type": "Tool Number",
      "Description": "Red handle crimper used for production"
    },
    {
      "Guid": "1006000003000000E",
      "Number": "CRIMP-0003",
      "Type": "Tool Number",
      "Description": "Yellow handle crimper used for production"
    },
    {
      "Guid": "1006000005000000W",
      "Number": "CRIMP-0004",
      "Type": "Tool Number",
      "Description": "test updating notes"
    }
  ]
}
```

GET Service Objects General

/serviceObjects/<GUID>

Returns the information within the General page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the General page of a Service Object object with a given GUID.

GET /serviceObjects/<GUID>

```
{
  "Guid": "1006000004000000N",
  "Number": "SER-2020-04-10-1000",
  "Type": "Serial Number",
  "Notes": "Yellow handle crimper used for production",
  "SignoffStatus": "Pending",
  "CreatedBy": {
    "Guid": "185Q00000N000000T"
```

```
    },
    "CreatedOn": "2020-04-10T21:11:15Z",
    "CustomFields": [
      {
        "Name": "Customer / Supplier Name",
        "Value": "Acme Manufacturing"
      },
      {
        "Name": "Customer or Supplier",
        "Value": "Supplier"
      },
      {
        "Name": "Address",
        "Value": "1085 Main St. Las Vegas, Nevada 89109"
      },
      {
        "Name": "Date Code If Applicable",
        "Value": ""
      },
      {
        "Name": "Tool Location",
        "Value": ""
      }
    ]
  }
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Service Objects Attributes

/serviceObjects/<GUID>/attributes

Returns the information within the Attributes page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Attributes page of a Service Objects object with a given GUID.

GET /serviceObjects/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Audit Frequency",
      "Value": "Quarterly"
    },
    {

```

```
    "Name": "Audit Object",  
    "Value": ""  
  },  
  {  
    "Name": "Last Audit Date",  
    "Value": "10/26/2020"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Service Objects Documents

`/serviceObjects/<GUID>/documents`

Returns the information within the Documents page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Documents page of a Service Objects object with a given GUID.

GET `/serviceObjects/<GUID>/documents`

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "186H000003000000K",
      "Title": "7_4 Ref Des not wrapping",
      "Type": "",
      "Version": "1",
    }
  ]
}
```

```
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "7_4 Ref Des not wrapping.png"
  },
  {
    "Guid": "186H000002000000B",
    "Title": "7_5 Ref Des Wrapping",
    "Type": "",
    "Version": "1",
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "Public",
    "FileNameOrUrl": "7_5 Ref Des Wrapping.png"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Service Object Document Content

`/serviceObjects/<GUID>/documents/<GUID>/content`

Returns the content of a document with a given GUID of a Service Objects with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET `/serviceObjects/<GUID>/documents/<GUID>/content`

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Service Objects Where Used

`/serviceObjects/<GUID>/whereUsed`

Returns the information within the Where Used page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Where Used page of a Service Objects object with a given GUID.

GET `/serviceObjects/<GUID>/whereUsed`

```
{
  "Count": 2,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000XG00010C1"
    },
    {

```

```
      "ObjectType": "Item",  
      "Guid": "10000000XG00010C1"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Service Objects Quality

`/serviceObjects/<GUID>/quality`

Returns the information within the Quality page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Quality page of a Service Objects object with a given GUID.

GET `/serviceObjects/<GUID>/quality`

```
{
  "Count": 2,
  "Results": [
    {
      "ObjectType": "Quality",
      "Guid": "100400000M000000R"
    },
    {

```

```
      "ObjectType": "Quality",  
      "Guid": "100400000K0000009"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Service Object Service Objects

/serviceObjects/<GUID>/serviceObjects

Returns the information within the Service Objects page of a Service Objects object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Service Objects within the Service Objects page of a Service Object with a given GUID.

GET /serviceObjects/<GUID>/serviceObjects

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1006000001000000V"
    },
    {
      "Guid": "10060000020000005"
    }
  ]
}
```

```
    },  
    {  
      "Guid": "1006000003000000E"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```


GET Service Objects Associations

`/serviceObjects/<GUID>/associations`

Returns associations from the Associations page of a Service Object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the associations from the Associations page of a Service Object with a given GUID.

GET `/serviceObjects/<GUID>/associations`

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "185U00007Y0000003",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000UB0000V3V"
      }
    }
  ]
}
```

```
    }
  },
  {
    "Guid": "185U000080000000J",
    "AssociatedObject": {
      "ObjectType": "Item",
      "Guid": "100000002F00002JM"
    }
  },
  {
    "Guid": "185U000081000000S",
    "AssociatedObject": {
      "ObjectType": "Item",
      "Guid": "100000002H00002LN"
    }
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Service Objects Where Associated

`/serviceObjects/<GUID>/whereAssociated`

Returns information on objects where this Service Object is an association. This information can be found within the Where Associated section of the Associations page of the Service Object.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Where Associated section of the Associations page of a Service Object with a given GUID.

GET `/serviceObjects/<GUID>/whereAssociated`

```
{
  "Count": 3,
  "Results": [
    {
      "ObjectType": "Quality",
      "Guid": "100400000K0000009"
    }
  ]
}
```

```
    },  
    {  
      "ObjectType": "Quality",  
      "Guid": "100400000M000000R"  
    },  
    {  
      "ObjectType": "VendorItem",  
      "Guid": "100500001M0000008"  
    }  
  ]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Service Object Email History

/serviceObjects/<GUID>/emailHistory

Returns the email history of a Service Object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Service Objects with a given GUID.

GET /serviceObjects/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "Service Object Released",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "Service Object Released: CRIMP-0004",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "CRIMP-0004 is released.<br/><br/><a
href=\ "http://beta.omnifyonline.com/V750/Apps/Desktop/Service/Object... "
    },
    {
      "Action": "Service Object Awaiting Release",
      "SentOn": "2021-04-01T01:40:57Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "CRIMP-0004",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "CRIMP-0004 for API testing<br/><br/><a
href=\ "http://beta.omnifyonline.com/V750/Apps/Desktop/Service/Object... "
    },
    {
      "Action": "Service Object Rejected",
      "SentOn": "2021-04-01T01:40:29Z",
      "SentFrom": {
        "Guid": "185Q0000140000005",
        "FullName": "Andrea Smith"
      },
      "Subject": "Service Object Rejected - CRIMP-0004",
      "Type": "Automatic",
      "Tool": "Empower Mail Services",
      "SentTo": "asmith@everyroadgps.com",
      "Contents": "CRIMP-0004 for API testing<br/><br/>Rejection
comment:<br/>test rejection<br/><br/><br/><a
href=\ "http://beta.omnifyonline.com/V750/Apps/Desktop/Service/Object... "
    },
    ...
  ]
}

```

Request with bad GUID

```

{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Service Objects Viewing History

/serviceObjects/<GUID>/viewingHistory

Returns the viewing history of a Service Objects of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a Service Object with a given GUID.

GET /serviceObjects/<GUID>/viewingHistory

```
{
  "Count": 17,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    }
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET Service Object Change History

/serviceObjects/<GUID>/changeHistory

Returns the modification history of a Service Object of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a Service Object object with a given GUID.

GET /serviceObjects/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Association Added",
      "Details": "51-0001-00 - Bearing Flange (Rev: 1.0)",
      "Rev": "",
      "User": {
```

```
        "Guid": "185Q00000N000000T",
        "FullName": "Richard Simpson"
    },
    "DateTime": "2020-05-15T18:05:24Z",
    "Tool": "Desktop"
},
{
    "Action": "Association Added",
    "Details": "01-0007-00 - Electrical Assembly (Rev: 1.3)",
    "Rev": "",
    "User": {
        "Guid": "185Q00000N000000T",
        "FullName": "Richard Simpson"
    },
    "DateTime": "2020-04-21T14:13:33Z",
    "Tool": "Desktop"
},
{
    "Action": "Association Added",
    "Details": "01-0006-00 - Solidworks Flange Assembly (Rev: 1.2)",
    "Rev": "",
    "User": {
        "Guid": "185Q00000N000000T",
        "FullName": "Richard Simpson"
    },
    "DateTime": "2020-04-21T14:13:33Z",
    "Tool": "Desktop"
},
{
    "Action": "Association Removed",
    "Details": "ECO-00004 (ECO) - Next revision of product",
    "Rev": "",
    "User": {
        "Guid": "185Q00000N000000T",
        "FullName": "Richard Simpson"
    },
    "DateTime": "2020-04-21T14:13:29Z",
    "Tool": "Desktop"
},
...
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Service Objects Training

/serviceObjects/<GUID>/trainings

Returns the information within the Training page of a Service Object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the GUIDs of Training objects within the Training page of a Service Object with a given GUID.

GET /serviceObjects/<GUID>/trainings

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100700000B00000FK"
    }
  ]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

POST Service Object Document Upload

/serviceObjects/<GUID>/documents

Uploads a document into the Documents page of an Service Objects.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: Redhandle crimper used for Production
type: Diagram
notes: Used in Manufacturing
Keywords: RedCrimper
vault: Public
version: A
file: red_crimper.png
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page of a Service Object with a given GUID.

POST /serviceObjects/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "Redhandle crimper used for Production",
  "Type": "Diagram",
  "Version": "A",
  "Notes": "Used in Manufacturing",
  "Keywords": "RedCrimper",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "red_crimper.png"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Service Objects Update General

/serviceObjects/<GUID>

Updates the General page of a Service Object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Service Object.

```
{
  "Guid": "1006000005000000W",
  "Number": "CRIMP-0004",
  "Type": "Tool Number",
  "Notes": "test updating notes"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Service Object with a given GUID.

PUT /serviceObjects/<GUID>

```
{
  "Guid": "1006000005000000W",
  "Number": "CRIMP-0004",
  "Type": "Tool Number",
  "Notes": "test updating notes",
  "SignoffStatus": "Awaiting Release",
  "Image": "",
  "CreatedBy": {
    "Guid": "185Q0000140000005"
  },
  "CreatedOn": "2021-02-23T02:33:09Z",
  "CustomFields": [
    {
      "Name": "Customer / Supplier Name",
      "Value": "Test Supplier Name"
    },
    {
      "Name": "Customer or Supplier",
      "Value": ""
    },
    {
      "Name": "Address",
      "Value": ""
    },
    {
      "Name": "Date Code If Applicable",
      "Value": ""
    },
    {
      "Name": "Tool Location",
      "Value": "Production Test"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


PUT Service Objects Update Attributes

/serviceObjects/<GUID>/attributes

Updates the Attributes page of a Service Objects with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Service Object.

```
[
  {
    "Name": "Audit Frequency",
    "Value": "2"
  },
  {
    "Name": "Audit Object",
    "Value": "Yes"
  },
  {
    "Name": "Last Audit Date",
    "Value": "2021-01-17"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |

| Name | Value | Description |
|--------|------------------------|---|
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Service Object with a given GUID.

PUT /serviceObjects/<GUID>/attributes

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Audit Frequency",
      "Value": "2"
    },
    {
      "Name": "Audit Object",
      "Value": "Yes"
    },
    {
      "Name": "Last Audit Date",
      "Value": "2021-01-17"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training (Search)

/trainings

Returns a collection of Training objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|-------------------------|--------|--|
| Name | string | The name of the Training object as listed within the General page of the Training object. |
| Description | string | The Description of the Training. |
| Type | string | The Training type. |
| Priority | string | The Priority field assigned to the Training. |
| Trainer | string | User listed as the manager of the Training object. |
| Frequency | string | The frequency in which Training assignments are given out. |
| Status | string | The status of the Training. |
| [Custom Training Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Attribute Name] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |
| Comment | string | Comments associated with the object. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Document Title should be typed as Document%20Title.

Response Header

| Name | Value | Description |
|----------------|------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |

| Name | Value | Description |
|--------|------------------------|---|
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Training Items with a normal priority..

GET /trainings?Priority=Normal

```
{
  "Count": 18,
  "Results": [
    {
      "Guid": "100700000D00000R6",
      "Name": "00-0002-00",
      "Description": "SmartWall",
      "Type": "Calibration",
      "Priority": "Normal",
      "Frequency": "Recurring - Scheduled and Revision Change",
      "Rev": "1.1"
    },
    {
      "Guid": "100700000E00000U7",
      "Name": "00-0003-00",
      "Description": "SmartHouse Objectives and Mission Statement",
      "Type": "SOP Training",
      "Priority": "Normal",
      "Frequency": "One Time",
      "Rev": "3.1"
    },
    {
      "Guid": "100700000F00000QF",
      "Name": "00-0004-00",
      "Description": "Test Issue-2087",
      "Type": "",
      "Priority": "Normal",
      "Frequency": "Recurring - Rev Change",
      "Rev": "2.3"
    },
    {
      "Guid": "1007000002000002W",
      "Name": "CAL-00001",
      "Description": "Crimper Calibration",
      "Type": "Calibration",
      "Priority": "Normal",
      "Frequency": "Recurring - Scheduled and Revision Change",
      "Rev": "1.0"
    },
    {
      "Guid": "100700000I00000X0",
      "Name": "CER-00001",

```

```
        "Description": "",
        "Type": "Certification (Recurring)",
        "Priority": "Normal",
        "Frequency": "Recurring - Scheduled and Revision Change",
        "Rev": "1.0"
    },
    ...
]
}
```

Get all Training Items that have SOP Training for a value of Type and a Priority set to high.

GET /trainings?Type=SOP%20Training&Priority=High

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "100700000B00000FK",
      "Name": "00-0001-00",
      "Description": "Test Training DOCS",
      "Type": "SOP Training",
      "Priority": "High",
      "Frequency": "Recurring - Scheduled and Revision Change",
      "Rev": "1.0"
    }
  ]
}
```

Get all Training Items with 24 attendees..

GET /trainings?Attendees=24

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "1007000003000003F",
      "Name": "CRT-00001",
      "Description": "Microsoft Office standard and SOP training with company
templates - Updated",
      "Type": "Classroom Training",
      "Priority": "Normal",
      "Frequency": "One Time",
      "Rev": "1.0",
      "Attendees": "24"
    }
  ]
}
```

Request with an invalid search attribute. Empower API currently doesn't check the validity of the search attribute. Searching for an invalid attribute will result in no results.

GET /trainings?Teacher%20Name=*Walker

```
{  
  "Count": 0,  
  "errors": []  
}
```

GET Trainings General

/trainings/<GUID>

Returns the information within the General page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the General page of a Training object with a given GUID.

GET /trainings/<GUID>

```
{
  "Guid": "1007000003000003F",
  "Name": "CRT-00001",
  "Description": "Microsoft Office standard and SOP training with company templates",
  "Rev": "1.0",
  "Type": "Classroom Training",
  "Priority": "Normal",
```



```
"Status": "Active",
"Trainer": {
  "Guid": "185Q000000000000W"
},
"Frequency": "One Time",
"ComprehensionRequired": false,
"CreatedBy": {
  "Guid": "185Q0000010000006"
},
"CreatedOn": "2014-06-10T00:00:00Z",
"CustomFields": [
  {
    "Name": "Custom Training F1",
    "Value": ""
  }
]
}]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Trainings Users

/trainings/<GUID>/trainingUsers

Returns the user information within the Users page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Users page of a Training object with a given GUID.

GET /trainings/<GUID>/trainingUsers

```
{
  "Count": 11,
  "Results": [
    {
      "Guid": "186300000C000000A",
      "User": {
        "Guid": "185Q000002000000F"
      }
    },
  ],
}
```

```
    "Status": "Not Started",
    "Notes": "",
    "Group": "User Group:Manufacturing"
  },
  {
    "Guid": "186300000D000000J",
    "User": {
      "Guid": "185Q000006000000G"
    },
    "Status": "Not Started",
    "Notes": "",
    "Group": "User Group:Manufacturing"
  },
  {
    "Guid": "186300000B0000001",
    "User": {
      "Guid": "185Q0000010000006"
    },
    "Status": "Not Started",
    "Notes": "",
    "Group": "User Group:Electrical Engineering"
  },
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Trainings Items

/trainings/<GUID>/trainingItems

Returns the information within the Training Items page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Training Items page of a Training object with a given GUID.

GET /trainings/<GUID>/trainingItems

```
{
  "Count": 3,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000T40000TSW"
    },
    {

```

```
    "ObjectType": "Item",  
    "Guid": "10000000XG00010BR"  
  },  
  {  
    "ObjectType": "Item",  
    "Guid": "10000000XG00010C1"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Trainings Revisions Items

/trainings/<GUID>/revisionsItems

Returns the information within the Revision Items section of the Training Items page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns theRevision Items section of the Training Items page of a Training object with a given GUID.

GET /trainings/<GUID>/revisionItems

```
{
  "Count": 3,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000T40000TSW"
    }
  ],
}
```

```
{
  "ObjectType": "Item",
  "Guid": "10000000XG00010BR"
},
{
  "ObjectType": "Item",
  "Guid": "10000000XG00010C1"
}
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Tasks

/trainings/<GUID>/tasks

Returns the Tasks page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the Tasks page of a Training object with a given GUID.

GET /trainings/<GUID>/tasks

```
{
  "Count": 3,
  "Results": [
    {
      "Guid": "1865000001000000Y",
      "Index": 1,
      "TaskName": "Create Training Materials",
      "Time": 0.0,
    }
  ]
}
```



```

        "TimeUnit": "Day",
        "PctComplete": 0.0,
        "Notes": "",
        "Priority": "",
        "ChildTasks": [],
        "Resources": [],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": [
            {
                "Name": "Dept Responsible",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "1865000003000000H",
        "Index": 2,
        "TaskName": "Create Comprehension Test",
        "Time": 0.0,
        "TimeUnit": "Day",
        "PctComplete": 0.0,
        "Notes": "",
        "Priority": "",
        "ChildTasks": [],
        "Resources": [],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": [
            {
                "Name": "Dept Responsible",
                "Value": ""
            }
        ]
    },
    {
        "Guid": "18650000020000008",
        "Index": 3,
        "TaskName": "Determine User List",
        "Time": 0.0,
        "TimeUnit": "Day",
        "PctComplete": 0.0,
        "Notes": "",
        "Priority": "",
        "ChildTasks": [],
        "Resources": [],
        "PredecessorIndexes": [],
        "References": [],
        "CustomFields": [
            {
                "Name": "Dept Responsible",
                "Value": ""
            }
        ]
    }
}
    
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Attributes

/trainings/<GUID>/attributes

Returns the information within the Attributes page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Attributes page of a Training object with a given GUID.

GET /trainings/<GUID>/attributes

```
{
  "Count": 7,
  "Results": [
    {
      "Name": "Attendees",
      "Value": "24"
    },
    {

```

```
    "Name": "Audit Frequency",
    "Value": "Quarterly"
  },
  {
    "Name": "Audit Object",
    "Value": "Yes"
  },
  {
    "Name": "Certificate",
    "Value": "Yes"
  },
  {
    "Name": "Last Audit Date",
    "Value": "2021-03-01"
  },
  {
    "Name": "Location",
    "Value": "Suzhou Office"
  },
  {
    "Name": "Presentation",
    "Value": "Yes"
  }
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Trainings Documents

/trainings/<GUID>/documents

Returns the information within the Documents page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Documents page of a Training object with a given GUID.

GET /trainings/<GUID>/documents

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186H00000B000000M",
      "Title": "SmartHouse Objectives and Mission Statement",
      "Type": "",
      "Version": "1.0",
    }
  ]
}
```

```
    "Notes": "Guiding Principles for SmartWall, SmartTable, and all other  
initiatives",  
    "IsVaulted": true,  
    "Vault": "Public",  
    "FileNameOrUrl": "The Integration SmartHome Project Instructions.docx"  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Training Document Content

/trainings/<GUID>/documents/<GUID>/content

Returns the content of a document with a given GUID of a Training with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /trainings/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```


GET Trainings Revisions

/trainings/<GUID>/revisions

Returns the information within the Revisions page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information within the Revisions page of a Training object with a given GUID.

GET /trainings/<GUID>/revisions

```
{
  "Count": 4,
  "Results": [
    {
      "TrainingGuid": "100700000E00000U7",
      "Rev": "3.1",
      "CreatedOn": "2020-05-13T22:47:41Z"
    }
  ],
}
```

```
{
  "TrainingGuid": "100700000E00000TX",
  "Rev": "3.0",
  "CreatedOn": "2020-05-12T22:23:08Z"
},
{
  "TrainingGuid": "100700000E00000SO",
  "Rev": "2.0",
  "CreatedOn": "2020-05-12T22:14:22Z"
},
{
  "TrainingGuid": "100700000E00000JD",
  "Rev": "1.0",
  "CreatedOn": "2020-05-07T16:36:55Z"
}
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Email History

/trainings/<GUID>/emailHistory

Returns the email history of a Training with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the email history of a Training with a given GUID.

GET /trainings/<GUID>/emailHistory

```

"Count": 5,
"Results": [
  {
    "Action": "User Training",
    "SentOn": "2021-04-01T01:41:13Z",
    "SentFrom": {
      "Guid": "185Q0000140000005",
      "FullName": "Andrea Smith"
    }
  }
]
    
```

```

    },
    "Subject": "User Training: SOP-00002A",
    "Type": "Automatic",
    "Tool": "Empower Mail Services",
    "SentTo": "asmith@everyroadgps.com",
    "Contents": "SOP-00002A is released.<br/><br/><a
href=\http://ta.onifyonline.com/V50/App/Desktop/TrainingObject.ap?id=119\http://ta.onifyonline.com/V50/App/Desktop/TrainingObject.ap?id=119/a"
    },
    {
        "Action": "User Added",
        "SentOn": "2021-04-01T01:40:57Z",
        "SentFrom": {
            "Guid": "185Q0000140000005",
            "FullName": "Andrea Smith"
        },
        "Subject": "SOP-00002A",
        "Type": "Automatic",
        "Tool": "Empower Mail Services",
        "SentTo": "asmith@everyroadgps.com",
        "Contents": "SOP-00002A for API testing<br/><br/><a
href=\http://ta.onifyonline.com/V50/App/Desktop/TrainingObject.ap?id=119\http://ta.onifyonline.com/V50/App/Desktop/TrainingObject.ap?id=119/a"
    },
    ...
]
}

```

Request with bad GUID

```

{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}

```

GET Trainings Viewing History

/trainings/<GUID>/viewingHistory

Returns the viewing history of a Trainings of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a Training object with a given GUID.

GET /trainings/<GUID>/viewingHistory

```
{
  "Count": 14,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      },
    },
  ],
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Change History

/trainings/<GUID>/changeHistory

Returns the modification history of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a Training object with a given GUID.

GET /trainings/<GUID>/changeHistory

```
{
  "Count": 20,
  "Results": [
    {
      "Action": "Attribute: Presentation Changed",
      "Details": "From: to: Yes",
      "Rev": "1.0",
      "User": {
```

```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T20:51:55Z",
    "Tool": "Desktop"
},
{
    "Action": "Attribute: Last Audit Date Changed",
    "Details": "From: to: 2021-03-01",
    "Rev": "1.0",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T20:51:49Z",
    "Tool": "Desktop"
},
{
    "Action": "Attribute: Certificate Changed",
    "Details": "From: to: Yes",
    "Rev": "1.0",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T20:51:35Z",
    "Tool": "Desktop"
},
{
    "Action": "Attribute: Audit Object Changed",
    "Details": "From: to: Yes",
    "Rev": "1.0",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T20:51:32Z",
    "Tool": "Desktop"
},
{
    "Action": "Attribute: Attendees Changed",
    "Details": "From: to: 24",
    "Rev": "1.0",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T20:51:22Z",
    "Tool": "Desktop"
},
    ...
]
}
```

Request with bad GUID


```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Associations

/trainings/<GUID>/associations

Returns the information within the Associations page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information within the Associations page of a Training object with a given GUID.

GET /trainings/<GUID>/associations

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185U00008I0000006",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000VG0000WL7"
      }
    }
  ]
}
```

```
}
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Training Where Associated

/trainings/<GUID>/whereAssociated

Returns the objects that lists the Training object with a given GUID as an association.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the objects that list the Training object with a given GUID as an association.

GET /trainings/<GUID>/whereAssociated

```
{
  "Count": 5,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000Y600011GV"
    },
    {
```

```
    "ObjectType": "Item",  
    "Guid": "10000000Q400011ZV"  
  },  
  {  
    "ObjectType": "Quality",  
    "Guid": "10000000Z1600072NW"  
  },  
  ...  
]  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

POST Training Document Upload

/trainings/<GUID>/documents

Uploads a document into the Documents page of a Training.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: SOP Training Exam
type: Documents
notes: For Comprehension Test
Keywords: Training
vault: Public
version: A
file: 2020_everyhome_reference_guide.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page of a Training with a given GUID.

POST /trainings/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "SOP Training Exam",
  "Type": "Documents",
  "Version": "A",
  "Notes": "For Comprehension Test",
  "Keywords": "Training",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "2020_everyhome_reference_guide.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Training Update General

/trainings/<GUID>

Updates the General page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a Training. Note that in this request, the user is modifying the Trainer by inputting the Guid of a user.

```
{
  "Name": "CRT-00001",
  "Description": "Microsoft Office standard and SOP training with company templates",
  "Rev": "1.0",
  "Type": "Classroom Training",
  "Priority": "Normal",
  "Status": "Active",
  "Trainer": {
    "Guid": "185Q000000000000W"
  },
  "Frequency": "One Time",
  "ComprehensionRequired": false
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|--------|----------------------------------|
| Content-Length | number | number of characters in response |

| Name | Value | Description |
|--------------|------------------------|---|
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a Training with a given GUID.

PUT /trainings/<GUID>

```
{
  "Guid": "1007000003000003F",
  "Name": "CRT-00001",
  "Description": "Microsoft Office standard and SOP training with company templates",

  "Rev": "1.0",
  "Type": "Classroom Training",
  "Priority": "Normal",
  "Status": "Active",
  "Trainer": {
    "Guid": "185Q000000000000W"
  },
  "Frequency": "One Time",
  "ComprehensionRequired": false,
  "CreatedBy": {
    "Guid": "185Q0000010000006"
  },
  "CreatedOn": "2014-06-10T00:00:00Z",
  "CustomFields": [
    {
      "Name": "Custom Training F1",
      "Value": ""
    }
  ]
}
```

request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code":3011,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Training Update Attributes

/trainings/<GUID>/attributes

Updates the Attributes page of a Training object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a Training.

```
[
  {
    "Name": "Attendees",
    "Value": "24"
  },
  {
    "Name": "Audit Frequency",
    "Value": "Quarterly"
  },
  {
    "Name": "Audit Object",
    "Value": "Yes"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |

| Name | Value | Description |
|--------|------------------------|---|
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a Training object with a given GUID.

PUT /trainings/<GUID>/attributes

```
{
  "Count": 7,
  "Results": [
    {
      "Name": "Attendees",
      "Value": "24"
    },
    {
      "Name": "Audit Frequency",
      "Value": "Quarterly"
    },
    {
      "Name": "Audit Object",
      "Value": "Yes"
    },
    {
      "Name": "Certificate",
      "Value": "Yes"
    },
    {
      "Name": "Last Audit Date",
      "Value": "2021-03-01"
    },
    {
      "Name": "Location",
      "Value": "Suzhou, China Office"
    },
    {
      "Name": "Presentation",
      "Value": "Yes"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

```
}  
 ]  
}
```

GET HelpDesk Ticket (Search)

/tickets

Returns a collection of HelpDesk Ticket objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|---------------------------|--------|--|
| Number | string | The unique number of the HelpDesk Ticket listed within the General page of the HelpDesk ticket. |
| Subject | string | The subject of the HelpDesk ticket. |
| Description | string | The description field of the HelpDesk Ticket. |
| Owner | string | The owner of the HelpDesk Ticket. |
| Type | string | The HelpDesk Ticket type. |
| Category | string | The HelpDesk ticket category. |
| Priority | string | The priority level of the HelpDesk Ticket. |
| Status | string | The current status of the HelpDesk Ticket |
| Due Date | string | The due date of the HelpDesk Ticket. |
| Created By | string | The user that created the HelpDesk Ticket. |
| Creation Date | string | The date in which the HelpDesk Ticket was created. |
| Comment | string | Comments associated with the object. |
| [Custom Ticket Field] | string | Search by custom Fields created within Empower Administrator. Use the format Custom Field: <Custom Field Name> |
| [Custom Ticket Attribute] | string | Search by custom Attributes created within Empower Administrator. Use the format Attribute: <Attribute Name> |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |

Additional Notes:

- Search behavior in the Arena REST API differs from search behavior in the Arena application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Arena application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Document Title should be typed as Document%20Title.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Tickets

GET /tickets

```
{
  "Count": 5,
  "Results": [
    {
      "Guid": "100B0000010000006",
      "Number": "00-0001-00",
      "Subject": "",
      "Description": "",
      "Type": "",
      "Category": "",
      "Priority": ""
    },
    {
      "Guid": "100B000004000000X",
      "Number": "00-0002-00",
      "Subject": "Request Assistance on ECO-00038",
      "Description": "Need extended permissions for this approval. Please advise.",
      "Type": "Omnify ECO Help Request",
      "Category": "",
      "Priority": "High"
    },
    {
      "Guid": "100B0000050000007",
      "Number": "00-0003-00",
      "Subject": "tr",
      "Description": "tr",
      "Type": "Shop Floor Assembly Help",
      "Category": "Desktop Software",
    }
  ]
}
```

```
    "Priority": ""
  },
  {
    "Guid": "100B000002000000F",
    "Number": "HLP-000001",
    "Subject": "TEST",
    "Description": "TREST",
    "Type": "Omnify ECO Help Request",
    "Category": "",
    "Priority": ""
  },
  {
    "Guid": "100B0000030000000",
    "Number": "Test-Ticket-001",
    "Subject": "Test Subject",
    "Description": "Test Description Update",
    "Type": "IT Help Request",
    "Category": "",
    "Priority": ""
  }
]
}
```

Get HelpDesk Tickets that are Empower ECO Help Requests.

GET /tickets?Type=Empower ECO Help Requests

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "100B000004000000X",
      "Number": "00-0002-00",
      "Subject": "Request Assistance on ECO-00038",
      "Description": "Need extended permissions for this approval. Please advise.",
      "Type": "Omnify ECO Help Request",
      "Category": "",
      "Priority": "High"
    },
    {
      "Guid": "100B000002000000F",
      "Number": "HLP-000001",
      "Subject": "TEST",
      "Description": "TREST",
      "Type": "Omnify ECO Help Request",
      "Category": "",
      "Priority": ""
    }
  ]
}
```


GET Tickets General

/tickets/<GUID>

Returns information from the General page of a Ticket object of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the General page of a Ticket object with a given GUID.

GET /tickets/<GUID>

```
{
  "Guid": "100B000004000000X",
  "Number": "00-0002-00",
  "Subject": "Request Assistance on ECO-00038",
  "Description": "Need extended permissions for this approval. Please advise.",
  "Owner": {
    "Guid": "185Q00000F000000R"
  }
},
```

```
"Type": "Omnify ECO Help Request",
"Category": "",
"Priority": "High",
"Status": "Closed",
"CreatedBy": {
  "Guid": "185Q00000U000000M"
},
"CreatedOn": "2021-03-12T22:59:27Z",
"CustomFields": []
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Tickets Attributes

/tickets/<GUID>/attributes

Returns the information within the Attributes page of a Ticket object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Attributes page of a Ticket object with a given GUID.

GET /tickets/<GUID>/attributes

```
{
  "Count": 1,
  "Results": [
    {
      "Name": "Ticket Type",
      "Value": "Empower Administrator Help"
    }
  ]
}
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Tickets Comments

/tickets/<GUID>/comments

Returns the information within the Comments page of a Ticket object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Searchable Attributes

| Name | Value | Description |
|--------------|---------|---|
| solutionOnly | Boolean | If solutionOnly is set to true, search returns only comments marked as solutions will be returned. Omitting this attribute assumes that this attribute is set to false. |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns only comments that are marked as solutions.

GET tickets/<GUID>/comments?solutionOnly=true

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T000004000000P",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "General Comments",
      "CommentText": "This should be added to our knowledge database once
resolved.",
      "IsSolution": true,
      "CreatedOn": "2021-03-12T23:01:13Z"
    }
  ]
}
```

Returns information from the Comments page of a Ticket object with a given GUID.

GET /tickets/<GUID>/comments

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "185T000004000000P",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "General Comments",
      "CommentText": "This should be added to our knowledge database once
resolved.",
      "IsSolution": true,
      "CreatedOn": "2021-03-12T23:01:13Z"
    },
    {
      "Guid": "185T000003000000G",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "General Comments",
      "CommentText": "Note, I'm unable to release the new rev of the SmartHome
project until this ticket is resolved.<br>",
      "IsSolution": false,
      "CreatedOn": "2021-03-12T23:00:30Z"
    }
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Tickets Documents

/tickets/<GUID>/documents

Returns the information within the Documents page of a Ticket object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Documents page of a Ticket object with a given GUID.

GET /tickets/<GUID>/documents

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186H000003000000K",
      "Title": "Screenshot of my ECO Issue",
      "Type": "",
      "Version": "1",
    }
  ]
}
```



```
    "Notes": "",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "",
    "FileNameOrUrl": "Screenshot of ECO-000045.png"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET HelpDesk Ticket Document Content

/tickets/<GUID>/documents/<GUID>/content

Returns the content of a document with a given GUID of a HelpDesk Ticket with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /tickets/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET Tickets Associations

/tickets/<GUID>/associations

Returns the information within the Associations page of a Ticket object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Associations page of a Ticket object with a given GUID.

GET /tickets/<GUID>/associations

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185U00007M0000000",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000XG00010C1"
      }
    }
  ]
}
```

```
}  
  }  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET Tickets Where Associated

/tickets/<GUID>/whereAssociated

Returns the objects that lists the Ticket object with a given GUID as an association.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns the objects that lists the Ticket object with a given GUID as an association.

GET /tickets/<GUID>/whereAssociated

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000VH0000WMP"
    }
  ]
}
```

```
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Tickets Change History

/tickets/<GUID>/changeHistory

Returns the modification history of a Ticket object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a Ticket object with a given GUID.

GET /tickets/<GUID>/changeHistory

```
{
  "Count": 8,
  "Results": [
    {
      "Action": "Owner Changed",
      "Details": "From: to: Georgia O'Keefe",
      "Rev": "",
      "User": {
```



```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T23:13:42Z",
    "Tool": "Desktop"
},
{
    "Action": "Comment Added",
    "Details": "User: Barbara McClintock",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T23:01:13Z",
    "Tool": "Desktop"
},
{
    "Action": "Comment Added",
    "Details": "User: Barbara McClintock",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-12T23:00:30Z",
    "Tool": "Desktop"
},
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Tickets Viewing History

/tickets/<GUID>/viewingHistory

Returns the viewing history of a Tickets of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a Tickets object with a given GUID.

GET /tickets/<GUID>/viewingHistory

```
{
  "Count": 9,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    }
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

POST HelpDesk Ticket Document Upload

/tickets/<GUID>/documents

Uploads a document into the Documents page of a HelpDesk Ticket.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: Screenshot of ECO-000098 Issue
type: Bug
notes: Mac Version
Keywords: Bug
vault: Public
version: A
file: screenshot_of_ECO_000098.png
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page of a HelpDesk Post with a given GUID.

POST /posts/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "Screenshot of ECO-000098 Issue",
  "Type": "Bug",
  "Version": "A",
  "Notes": "Mac Version",
  "Keywords": "Bug",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "screenshot_of_ECO_000098.png"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Tickets Update General

/tickets/<GUID>

Updates the General page of a HelpDesk Ticket with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|--|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a HelpDesk Ticket.

```
{
  "Number": "Test-Ticket-001",
  "Subject": "Test Subject",
  "Description": "Test Description Update",
  "Owner": {
    "Guid": "185Q00000J000000S"
  },
  "Type": "IT Help Request",
  "Category": "Desktop Software",
  "Priority": "Normal",
  "Status": "New"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |

| Name | Value | Description |
|--------|------------------------|---|
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a HelpDesk Ticket with a given GUID.

PUT /tickets/<GUID>

```
{
  "Guid": "100B0000030000000",
  "Number": "Test-Ticket-001",
  "Subject": "Test Subject",
  "Description": "Test Description Update",
  "Owner": {
    "Guid": "185Q00000J000000S"
  },
  "Type": "IT Help Request",
  "Category": "Desktop Software",
  "Priority": "Normal",
  "Status": "New",
  "CreatedBy": {
    "Guid": "185Q0000140000005"
  },
  "CreatedOn": "2021-02-23T02:07:26Z",
  "CustomFields": []
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

PUT Ticket Update Attributes

/tickets/<GUID>/attributes

Updates the Attributes page of a HelpDesk Ticket with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the attributes of a HelpDesk Ticket.

```
[
  {
    "Name": "Urgency",
    "Value": "High"
  }
]
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the Attributes page of a HelpDesk Ticket with a given GUID.

PUT /tickets/<GUID>/attributes

```
{
  "Count": 1,
  "Results": [
    {
      "Name": "Urgency",
      "Value": "High"
    }
  ]
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET HelpDesk Post (Search)

/posts

Returns a collection of HelpDesk Posts objects matching the given search criteria.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Parameters

| Name | Value | Description |
|--------|---------|--|
| offset | integer | Specifies the position in the list of all items where results should begin. All items before the offset in the search results are ignored. The default value is 0. |
| limit | integer | Specifies the number of results that should be returned. By default the maximum number of items is 20. Can return up to 500 objects. |
| Sort | string | Sorts the results by the Field or Attribute specified. When used in conjunction with Order it specifies the results in Ascending or Descending order. |
| Order | string | Specifies the order in which results appear. ASC for ascending alphanumeric order. DESC for descending alphanumeric order. |
| Fields | string | Specifies the fields or attributes that should be displayed in the results for each object. The order in which the fields and attributes are typed into the URL determines their order in which they appear for each object. Some fields such as GUID will always be present and appear first. If Fields is omitted the results will just display the required fields. |

Searchable Attributes

| Name | Value | Description |
|-------------------------|--------|---|
| Title | string | The title of the HelpDesk Post |
| Description | string | The description of the HelpDesk Post |
| Rating | string | The rating of the HelpDesk Post. Ratings are from 0.00 to 5.00. |
| Created By | string | The full name (first and last) of the creator of the item |
| Creation Date | string | The date in which the HelpDesk Post was created. |
| Comment | string | Comments entered into the Comments page of the HelpDesk Post. |
| Document File Path/Name | string | The actual name of the file or the file path of the Document. |
| Document Title | string | The Title of the Document associated with the object. |
| Document Type | string | The Type of the Document associated with the object. |
| Document Vault | string | Indicates whether the Document associated with the object is Public or Private. |

Additional Notes:

- Search behavior in the Empower REST API differs from search behavior in the Empower application. In the API, a trailing asterisk (wildcard) is required to return results that start with a string; in the Empower application, a trailing asterisk is always implied.
- Search attributes that contains spaces should encode the spaces with %20. For example, the search attribute Document Title should be typed as Document%20Title.

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------|----------------------------------|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |

| Name | Value | Description |
|--------|------------------------|---|
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get all Projects made by a specific user.

GET /posts?Created%20By=Barbara%20Mcclintock

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "100A000007000000G",
      "Title": "Bertrand Johnson is now an Empower Administrator",
      "Description": "ds",
      "Type": "Message",
      "Category": "Administrative",
      "Rating": 0.00,
      "Creation Date": "2021-04-05T23:19:32Z",
      "Created By": "Barbara McClintock"
    },
    {
      "Guid": "100A000004000000O",
      "Title": "Mac Users: Update EveryComputer VPN to version 5.1",
      "Description": "All Mac Users are required to update to EveryComputer
VPN 5.1",
      "Type": "Message",
      "Category": "",
      "Rating": 5.00,
      "Creation Date": "2021-03-13T00:33:55Z",
      "Created By": "Barbara McClintock"
    }
  ]
}
```

Get all HelpDesk Posts with a 5.00 rating and is a HelpDesk Post type of Message.

GET /posts?Rating=5.00&Type=Message

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "100A000004000000O",
      "Title": "Mac Users: Update EveryComputer VPN to version 5.1",
      "Description": "All Mac Users are required to update to EveryComputer
VPN 5.1",
      "Type": "Message",
      "Category": "",
      "Rating": 5.00,
      "Creation Date": "2021-03-13T00:33:55Z"
    }
  ]
}
```

```
    },  
    {  
      "Guid": "100A000003000000F",  
      "Title": "Test-Post-001",  
      "Description": "Please update to the latest operating system.",  
      "Type": "Message",  
      "Category": "",  
      "Rating": 5.00,  
      "Creation Date": "2021-02-23T01:59:01Z"  
    }  
  ]  
}
```

Request with an invalid search attribute. Empower API currently doesn't check the validity of the search attribute. Searching for an invalid attribute will result in no results.

GET /Posts?topic.Name=*Windows%20365

```
{  
  "Count": 0,  
  "errors": []  
}
```

GET HelpDesk Post General

/posts/<GUID>

Returns information from the General page of a HelpDesk Post of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the General page of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>

```
{
  "Guid": "100A000004000000",
  "Title": "Mac Users: Update EveryComputer VPN to version 5.1",
  "Description": "All Mac Users are required to update to EveryComputer VPN 5.1",
  "Type": "Message",
  "Category": "",
  "Rating": 5.00,
  "CreatedBy": {
```

```
    "Guid": "185Q00000U000000M"  
  },  
  "CreatedOn": "2021-03-13T00:33:55Z",  
  "IsPublic": true  
}
```

Request with bad GUID

```
{  
  "status": 400,  
  "errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET HelpDesk Post Comments

`/posts/<GUID>/comments`

Returns the information within the Comments page of a HelpDesk Post with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Searchable Attributes

| Name | Value | Description |
|--------------|---------------|--|
| solutionOnly | True or False | If solutionOnly is set to true returns, only comments marked as solutions will be returned. Omitting this attribute assumes that this attribute is set to false. |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns only comments that are marked as solutions.

GET `posts/<GUID>/comments?solutionOnly=true`


```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "185T000003000000G",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "Approval Comment",
      "CommentText": "Thanks for including a graphic of the instructions.<br>",
      "IsSolution": false,
      "CreatedOn": "2021-03-13T00:34:29Z"
    }
  ]
}
```

Returns all information from the Comments page of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>/comments

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "185T000004000000P",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "Approval Comment",
      "CommentText": "Please use the following Access Key:LKHE9892839KJDHFSKDJH",
      "IsSolution": true,
      "CreatedOn": "2021-03-13T01:24:36Z"
    },
    {
      "Guid": "185T000003000000G",
      "Creator": {
        "Guid": "185Q00000U000000M"
      },
      "Type": "Approval Comment",
      "CommentText": "Thanks for including a graphic of the instructions.<br>",
      "IsSolution": false,
      "CreatedOn": "2021-03-13T00:34:29Z"
    }
  ]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET HelpDesk Post Documents

/posts/<GUID>/documents

Returns the information within the Documents page of a HelpDesk Post object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information of the Documents page of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>/documents

```
{
  "Count": 1,
  "Results": [
    {
      "Guid": "186H000003000000K",
      "Title": "Updating VPN for Mac",
      "Type": "Datashet",
      "Version": "1",
    }
  ]
}
```

```
    "Notes": "Instructions",
    "Keywords": "",
    "IsVaulted": true,
    "Vault": "",
    "FileNameOrUrl": "Instructions On How to Update your VPN.png"
  }
]
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET HelpDesk Post Document Content

/posts/<GUID>/documents/<GUID>/content

Returns the content of a document with a given GUID of a HelpDesk Post with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time |
| Server | Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the contents of a specific document.

GET /posts/<GUID>/documents/<GUID>/content

No JSON response. Returns the content of the File as an Input Stream.

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
```

```
    "code": 2042,  
    "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
  }  
]  
}
```

GET HelpDesk Posts Associations

/posts/<GUID>/associations

Returns the information within the Associations page of a HelpDesk Post object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Associations page of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>/associations

```
{
  "Count": 2,
  "Results": [
    {
      "Guid": "185U00007P000000R",
      "AssociatedObject": {
        "ObjectType": "Item",
        "Guid": "10000000VG0000WL7"
      }
    }
  ]
}
```

```
    }
  },
  {
    "Guid": "185U00007Q0000001",
    "AssociatedObject": {
      "ObjectType": "Vendor",
      "Guid": "1003000004000000V"
    }
  }
]
}
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


GET HelpDesk Post Where Associated

/posts/<GUID>/whereAssociated

Returns information on objects where this HelpDesk Post is an association. This information can be found within the Where Associated section of the Associations page of the HelpDesk Post.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns information from the Where Associated section of the Associations page of a HelpDesk Post with a given GUID.

GET /posts/<GUID>/whereAssociated

```
{
  "Count": 1,
  "Results": [
    {
      "ObjectType": "Item",
      "Guid": "10000000VG0000WL7"
    }
  ]
}
```

```
}  
]  
}
```

Request with bad GUID

```
{  
  "status":400,  
  "errors":[  
    {  
      "code": 2042,  
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."  
    }  
  ]  
}
```

GET HelpDesk Posts Change History

/posts/<GUID>/changeHistory

Returns the modification history of a HelpDesk Posts object with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns modification history of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>/changeHistory

```
{
  "Count": 5,
  "Results": [
    {
      "Action": "Comment Added",
      "Details": "User: Barbara McClintock",
      "Rev": "",
      "User": {
```

```
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-13T01:24:36Z",
    "Tool": "Desktop"
},
{
    "Action": "User Rated Post",
    "Details": "5",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-13T00:55:58Z",
    "Tool": "Desktop"
},
{
    "Action": "Association Added",
    "Details": "00-0018-00 - PowerQuicc MPC860EC (Rev: 1)",
    "Rev": "",
    "User": {
        "Guid": "185Q00000U000000M",
        "FullName": "Barbara McClintock"
    },
    "DateTime": "2021-03-13T00:33:55Z",
    "Tool": "Desktop"
},
...
]
```

Request with bad GUID

```
{
  "status":400,
  "errors":[
    {
      "code": 2042,
      "message":"The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET HelpDesk Post Viewing History

/posts/<GUID>/viewingHistory

Returns the viewing history of a HelpDesk Post of a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|---------------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json; charset=utf-8 | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Returns viewing history of a HelpDesk Post object with a given GUID.

GET /posts/<GUID>/viewingHistory

```
{
  "Count": 7,
  "Results": [
    {
      "User": {
        "Guid": "185Q00000H000000A",
        "FullName": "Raymond Sanders"
      }
    }
  ]
}
```

```
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:55Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000H000000A",
      "FullName": "Raymond Sanders"
    },
    "Workstation": "48.158.193.254",
    "DateTime": "2020-06-09T21:23:40Z",
    "Tool": "Desktop"
  },
  {
    "User": {
      "Guid": "185Q00000N000000T",
      "FullName": "Catherine Simpson"
    },
    "Workstation": "93.30.48.75",
    "DateTime": "2020-04-22T22:22:58Z",
    "Tool": "Desktop"
  },
  ...
]
}
```

Request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 2042,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

POST HelpDesk Post Document Upload

/posts/<GUID>/documents

Uploads a document into the Documents page of a HelpDesk Post.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | multipart/form-data | |

Sample Request Body

Creating a File and uploading content to Empower.

```

title: Instructions on How to Configure Two Factor Authentication
type: Instructions
notes: Mac Version
Keywords: TFA
vault: Public
version: A
file: configuring_two_factor_authentication.pdf
    
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Creates a document within the Documents page of a HelpDesk Post with a given GUID.

POST /posts/GUID/documents

```
{
  "Guid": "186H0000850000000",
  "Title": "Instructions on How to Configure Two Factor Authentication",
  "Type": "Instructions",
  "Version": "A",
  "Notes": "Mac Version",
  "Keywords": "TFA",
  "IsVaulted": true,
  "Vault": "Public",
  "FileNameOrUrl": "configuring_two_factor_authentication.pdf"
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```


PUT HelpDesk Posts Update General

/posts/<GUID>

Updates the General page of a HelpDesk Post with a given GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Sample Request Body

Update the fields within the General page of a HelpDesk Post.

```
{
  "Guid": "100A000003000000F",
  "Title": "Test-Post-001",
  "Description": "Please update to the latest operating system.",
  "Type": "Message",
  "Category": "Administrative"
}
```

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Updates the General page of a HelpDesk Post with a given GUID.

PUT /posts/<GUID>

```
{
  "Guid": "100A000003000000F",
  "Title": "Test-Post-001",
  "Description": "Please update to the latest operating system.",
  "Type": "Message",
  "Category": "Administrative",
  "Rating": 5.00,
  "CreatedBy": {
    "Guid": "185Q0000140000005"
  },
  "CreatedOn": "2021-02-23T01:59:01Z",
  "IsPublic": true
}
```

request with bad GUID

```
{
  "status": 400,
  "errors": [
    {
      "code": 3011,
      "message": "The guid \"L3N6PX663K3K3HOB00T0 \" is not valid."
    }
  ]
}
```

GET Users Info

/users

Returns all the information for all users within the Empower Desktop.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the user information for all users in your Empower Desktop.

GET /users

```
[
  {
    "UserName": "bmclintock",
    "Guid": "185Q00000U000000M",
    "FullName": "Barbara McClintock"
  },
  {
    "UserName": "cmonet",
```

```
    "Guid": "185Q000006000000G",  
    "FullName": "Claude Monet"  
  },  
  {  
    "UserName": "emunch",  
    "Guid": "185Q00000B000000Q",  
    "FullName": "Edvard Munch"  
  },  
  {  
    "UserName": "gokeeffe",  
    "Guid": "185Q00000F000000R",  
    "FullName": "Georgia O'Keefe"  
  },  
  {  
    "UserName": "inewton",  
    "Guid": "185Q000007000000P",  
    "FullName": "Sir Issac Newton"  
  },  
  ...  
]
```

GET User Info

/users/<GUID>

Returns the user information of the user affiliated with the GUID.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time in GMT |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the user information when you input a user GUID.

GET /users/<GUID>

```
{
  "Guid": "185Q0000010000006",
  "FullName": "Henri Poincare",
  "UserName": "hpoincare",
  "Email": "hpoincare@everyroadgps.com",
  "Comment": "Principal Engineer",
  "BusinessUnit": "United States",
  "Signatory": {
```

```
    "Guid": "185Q00000I000000J"  
  },  
  "IsAdmin": true,  
  "PermissionGroup": "Super User",  
  "CustomFields": []  
}
```

Request with a bad GUID.

```
{  
  "Errors": [  
    {  
      "code": 2042,  
      "message": "The guid \"185Q00000I000000J\" is not a valid GUID."  
    }  
  ]  
}
```

GET Settings Item Types

/settings/items/types

Returns the Item Types listed within the Types, Item/Part/BOM Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Item Types from Empower Administrator.

GET /settings/items/types

```
{
  "Count": 9,
  "Results": [
    {
      "Name": "Assembly",
      "Description": "Items that contain Items within its BOM."
    },
    {

```

```
    "Name": "Document Tree",  
    "Description": ""  
  },  
  {  
    "Name": "Electrical Part"  
  },  
  {  
    "Name": "Finished Goods",  
    "Description": ""  
  },  
  {  
    "Name": "Mechanical Part"  
  },  
  {  
    "Name": "Misc",  
    "Description": ""  
  },  
  {  
    "Name": "Optics",  
    "Description": ""  
  },  
  {  
    "Name": "Software",  
    "Description": ""  
  },  
  {  
    "Name": "Tools",  
    "Description": ""  
  }  
]  
}
```


GET Settings Item Categories

`/settings/items/categories`

Returns the Item Lifecycles listed within the Lifecycles, Item/Part/BOM Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Item Categories from Empower Administrator.

GET `/settings/items/categories`

```
{
  "Count": 60,
  "Results": [
    {
      "Name": "Assembly",
      "Description": "",
      "MemberOf": "Assembly"
    }
  ],
}
```

```
{
  {
    "Name": "Battery",
    "Description": "",
    "MemberOf": "Electrical Part"
  },
  {
    "Name": "Buzzers",
    "Description": "",
    "MemberOf": "Electrical Part"
  },
  {
    "Name": "Cables",
    "Description": "",
    "MemberOf": "Electrical Part"
  },
  {
    "Name": "Capacitors",
    "Description": "",
    "MemberOf": "Electrical Part"
  },
  ...
]
}
```

GET Settings Item Lifecycles

/settings/items/lifecycles

Returns the Item Lifecycles listed within the Lifecycles, Item/Part/BOM Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Item Lifecycles from Empower Administrator.

GET /settings/items/lifecycles

```
{
  "Count": 7,
  "Results": [
    {
      "Name": "Near End Of Life",
      "Description": "Not for use in new designs"
    },
    {
```

```
    "Name": "Obsolete",  
    "Description": "No longer used in designs"  
  },  
  {  
    "Name": "Preliminary",  
    "Description": "Not ready for prototyping"  
  },  
  {  
    "Name": "Prototype",  
    "Description": "Proof of Work or Test Design"  
  },  
  {  
    "Name": "Released",  
    "Description": "Ready for Production Use"  
  },  
  ...  
]  
}
```

GET Settings Change Types

/settings/changes/types

Returns the Change Types listed within the Types, Change/ECO Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Changes Types from Empower Administrator.

GET /settings/changes/types

```
{
  "Count": 4,
  "Results": [
    {
      "Name": "Deviation",
      "Description": "Temporary Manufacturing Instruction"
    },
    {

```

```
    "Name": "ECO",  
    "Description": "Engineering Change Order"  
  },  
  {  
    "Name": "MCO",  
    "Description": "Manufacturing AVL Change"  
  },  
  {  
    "Name": "PCO",  
    "Description": "Prototype Change Request - Not Released Items"  
  }  
]  
}
```

GET Settings Project Types

/settings/projects/types

Returns the Projects Types listed within the Types, Project Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Project Types from Empower Administrator.

GET /settings/projects/types

```
{
  "Count": 6,
  "Results": [
    {
      "Name": "EE Product Development",
      "Description": ""
    },
    {
```

```
    "Name": "FMEA Team Definition",  
    "Description": "FMEA Team Definition"  
  },  
  {  
    "Name": "Mechanical Engineering Development",  
    "Description": ""  
  },  
  {  
    "Name": "New Product Introduction (NPI)",  
    "Description": ""  
  },  
  {  
    "Name": "Next Generation Product",  
    "Description": ""  
  },  
  {  
    "Name": "Sustaining Engineering",  
    "Description": ""  
  }  
]  
}
```


GET Settings Vendor Types

/settings/vendors/types

Returns the Vendor Types listed within the Types, Vendor Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Vendor Types from Empower Administrator.

GET /settings/vendors/types

```
{
  "Count": 4,
  "Results": [
    {
      "Name": "Contract Manufacturer",
      "Description": "Assists in assembling our products and sourcing their
own parts."
    },
  ],
}
```

```
{
  {
    "Name": "Distributor"
  },
  {
    "Name": "EMS Supplier",
    "Description": "Contract Manufacturer for Electronics. Provides design
and Support as well."
  },
  {
    "Name": "Manufacturer"
  }
]
}
```

GET Settings Vendor Status

/settings/vendors/status

Returns the Vendor Status listed within the Status, Vendor Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Vendor Status from Empower Administrator.

GET /settings/vendors/status

```
{
  "Count": 5,
  "Results": [
    {
      "Name": "Alternate"
    },
    {
      "Name": "Non-Preferred"
    }
  ]
}
```

```
    },  
    {  
      "Name": "Obsolete"  
    },  
    {  
      "Name": "Preferred"  
    },  
    {  
      "Name": "Preliminary"  
    }  
  ]  
}
```

GET Settings Quality Types

/settings/quality/types

Returns the Quality Types listed within the Types, Quality/CAPA Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Quality Types from Empower Administrator.

GET /settings/quality/types

```
{
  "Count": 6,
  "Results": [
    {
      "Name": "Complaint",
      "Description": "Customer Complaint"
    },
    {

```

```
    "Name": "Corrective Action",  
    "Description": "Corrective Action"  
  },  
  {  
    "Name": "FMEA",  
    "Description": "Failure Mode Effects Analysis"  
  },  
  {  
    "Name": "NCMR",  
    "Description": "Non-Conforming Material Report"  
  },  
  {  
    "Name": "SCAR",  
    "Description": "Supplier Corrective Action"  
  },  
  {  
    "Name": "Supplier Qualification and Audit",  
    "Description": "Supplier Qualification and Audit"  
  }  
]  
}
```

GET Settings Vendor Item Status

/settings/vendorItems/status

Returns the Vendor Items Status listed within the Status, Vendor Item/Part Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Vendor Item Statuses from Empower Administrator.

GET /settings/vendorItems/status

```
{
  "Count": 5,
  "Results": [
    {
      "Name": "Alternate",
      "Description": "Vendor Item Can Be Used in an Emergency"
    }
  ],
}
```

```
{
  {
    "Name": "Near EOL",
    "Description": "Deprecated. Not to be used in future designs."
  },
  {
    "Name": "Obsolete"
    "Description": "No longer used in any designs."
  },
  {
    "Name": "Preliminary Unapproved",
    "Description": ""
  },
  {
    "Name": "Primary",
    "Description": ""
  }
]
}
```


GET Settings Service Object Types

/settings/serviceObjects/types

Returns the Service Object Types listed within the Types, Service Object Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Service Object Types from Empower Administrator.

GET /settings/serviceObjects/status

```
{
  "Count": 5,
  "Results": [
    {
      "Name": "Incoming Inspection Tracking",
      "Description": ""
    },
    {

```

```
    "Name": "Lot Number",  
    "Description": ""  
  },  
  {  
    "Name": "Serial Number"  
  },  
  {  
    "Name": "Test Equipment Serial Number",  
    "Description": ""  
  },  
  {  
    "Name": "Tool Number",  
    "Description": ""  
  }  
]  
}
```

GET Settings Training Types

/settings/trainings/types

Returns the Training Types listed within the Types, Training Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Training Types from Empower Administrator.

GET /settings/trainings/types

```
{
  "Count": 7,
  "Results": [
    {
      "Name": "Calibration",
      "Description": ""
    },
    {
```

```
    "Name": "Certification (Recurring)",  
    "Description": ""  
  },  
  {  
    "Name": "Classroom Training",  
    "Description": ""  
  },  
  {  
    "Name": "External Training Classes",  
    "Description": ""  
  },  
  {  
    "Name": "Human Resources Training",  
    "Description": ""  
  },  
  {  
    "Name": "RBtrary Training",  
    "Description": ""  
  },  
  {  
    "Name": "SOP Training",  
    "Description": ""  
  }  
]  
}
```

GET Settings Training Status

/settings/trainings/status

Returns the Training statuses listed within the Status, Training Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the Training statuses from Empower Administrator.

GET /settings/trainings/status

```
{
  "Count": 7,
  "Results": [
    {
      "Name": "Calibration",
      "Description": ""
    },
    {

```

```
    "Name": "Certification (Recurring)",  
    "Description": ""  
  },  
  {  
    "Name": "Classroom Training",  
    "Description": ""  
  },  
  {  
    "Name": "External Training Classes",  
    "Description": ""  
  },  
  {  
    "Name": "Human Resources Training",  
    "Description": ""  
  },  
  {  
    "Name": "RBtrary Training",  
    "Description": ""  
  },  
  {  
    "Name": "SOP Training",  
    "Description": ""  
  }  
]  
}
```

GET BOM Configuration Types

/settings/bomConfigurations/types

Returns the BOM Configuration Types listed within the Types, BOM Configurations Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the BOM Configuration Types from Empower Administrator.

GET /settings/bomConfigurations/types

```
{
  "Count": 2,
  "Results": [
    {
      "Name": "Engineering",
      "Description": ""
    },
  ],
}
```

```
{
  {
    "Name": "Manufacturing",
    "Description": ""
  }
}
```


GET HelpDesk Post Types

/settings/posts/types

Returns the HelpDesk Post Types listed within the Types, HelpDesk Post Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the HelpDesk Post Types from Empower Administrator.

GET /settings/posts/types

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Document"
    },
    {
      "Name": "Message"
    }
  ]
}
```

```
    },  
    {  
      "Name": "Product Tip"  
    }  
  ]  
}
```

GET HelpDesk Post Categories

`/settings/posts/categories`

Returns the HelpDesk Posts Categories listed within the Categories, HelpDesk Ticket Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the HelpDesk Posts Categories from Empower Administrator.

GET `/settings/posts/categories`

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Administrative",
      "Description": "Announcement about your Empower User Account."
    }
  ],
}
```

```
{
  {
    "Name": "Change",
    "Description": "Announcement about Change/ECO policy."
  },
  {
    "Name": "Quality",
    "Description": "Announcement about Quality/Issue policy."
  }
]
}
```

GET HelpDesk Ticket Types

/settings/tickets/types

Returns the HelpDesk Tickets Categories listed within the Types, HelpDesk Ticket Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the HelpDesk Ticket Types from Empower Administrator.

GET /settings/tickets/types

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "IT Help Request",
      "Description": ""
    }
  ],
}
```

```
{
  {
    "Name": "Omnify ECO Help Request",
    "Description": ""
  },
  {
    "Name": "Shop Floor Assembly Help",
    "Description": ""
  }
]
}
```

GET HelpDesk Ticket Categories

`/settings/tickets/categories`

Returns the HelpDesk Ticket Categories listed within the Categories, HelpDesk Ticket Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the HelpDesk Ticket Categories from Empower Administrator.

GET `/settings/tickets/categories`

```
{
  "Count": 2,
  "Results": [
    {
      "Name": "Desktop Software",
      "Description": "Request for an application."
    }
  ],
}
```

```
{
  "Name": "License Modification",
  "Description": "Request for an upgraded license to reflect additional
responsibilities."
}
]
```


GET HelpDesk Ticket Statuses

/settings/tickets/status

Returns the HelpDesk Ticket Statuses listed within the Status, HelpDesk Ticket Options page of Empower Administrator.

Request Header

| Name | Value | Description |
|---------------|-----------------------|---|
| authorization | Bearer <Access Token> | Required request header for all endpoints except login. The value of <Access Token> is the value of field "Access Token" which is obtained from the login response. The Access Token is set to expire in 24 hours by default. |
| content-type | application/json | |

Response Codes

| Code | Description |
|------|-------------|
| 200 | Success |
| 400 | Failure |

Response Header

| Name | Value | Description |
|----------------|------------------------|---|
| Content-Length | number | number of characters in response |
| Content-Type | application/json | content type of response |
| Date | date | today's date and time |
| Server | e.g. Microsoft-IIS/8.5 | Actual server can vary depending on the IIS version used. |

Sample Response Body

Get the HelpDesk Ticket Statuses from Empower Administrator.

GET /settings/tickets/status

```
{
  "Count": 3,
  "Results": [
    {
      "Name": "Closed"
    },
    {

```

```
    "Name": "In Progress"  
  },  
  {  
    "Name": "New"  
  }  
]  
}
```