



Integration API documentation

Table of Contents

1	Authentication	3
1.1	Generating client assertion	4
2	API endpoints	6
2.1	Upload document	6
2.2	Upload Cash Call document	10
2.3	Upload Billing document	12
2.4	Upload document rendition	14
2.5	Request status for upload tasks	16
2.6	Update document metadata	22
2.7	Get document comments	25
2.8	Create folder	28
2.9	Get message recipients	30
2.10	Send message about a document	33
2.11	Get metadata about company's content	38
2.12	Request status for get company's metadata task	41
2.13	Download document	51
2.14	Download Cash Call documents	54
2.15	Download Billing documents	56
2.16	Health check	58
2.17	Test	60
2.18	Get active workspaces	61
2.19	Get committees list	63
2.20	Get JV admins and Super users list	64
2.21	Get documents with latest comments	65
2.22	Get Group Memberships	67
2.23	Request status for get documents with latest comments task	70
2.24	Download folder content as a ZIP file	77
2.25	Request status for download folder content as a ZIP file task	79
3	Swagger	82
4	Examples	83
4.1	Call Test endpoint via Postman	84
5	Links	87
6	Appendix	88

1 Authentication

For using API, one needs to be authenticated [1]. The authentication consists of two steps:

- generating client assertion from the certificate;
- acquiring access token.

To succeed in acquiring an access token, you will need the following information for the current environment:

- AzureTenantID – a unique identifier of the tenant;
- ClientID – a unique identifier of the company’s service principal;
- ApplicationID – a unique identifier of the Integration API;
- Certificate – the private part of the company’s service principal certificate (a file with the extension “.pfx”);
- Password – a password of the private part of the company’s service principal certificate.

1.1 Generating client assertion

Client assertion is a JSON Web Token [2] [3]. To generate a client assertion on your local machine, you could use a simple console application which is listed in the appendix A.1.

Simply update the code with your values for:

- `_tenantId` – use `AzureTenantID`;
- `_clientId` – use `ClientID`;
- `_privateCertificatePath` – use your local path to Certificate;
- `_password` – use Password.

Run the console application and it will prompt a generated client assertion:



Copy the client assertion because you will need it on the next step. Client assertion has a short expiration period, so you need to generate it each time when you want to get an access token.

1.2. Acquiring access token

To acquire an access token from the client assertion, which was generated from your company certificate, you should use the Auth2.0 endpoint, provided by Microsoft [1].

Endpoint

Method	URL
POST	https://login.microsoftonline.com/{AzureTenantID}/oauth2/v2.0/token

Request header values

Header	Required?	Value
Content-Type	yes	application/x-www-form-urlencoded.

Request body

Key	Value
scope	{ApplicationID}/.default
client_id	{ClientID}
client_assertion_type:	urn:ietf:params:oauth:client-assertion-type:jwt-bearer
client_assertion	Client assertion generated on previous step
grant_type	client_credentials

Response body

Field	Type	Details
token_type	string	Type of the acquired access token. In our case “Bearer”.
expires_in	int	Access token lifetime in seconds. Standard value is 3599.
ext_expires_in	int	Access token extended lifetime in seconds.
access_token	string	Actual access token value.

2 API endpoints

To call any of Integration API endpoints, you will need the following information:

- BaseURL –API base URL for current environment;
- AccessToken – Access token acquired according to the paragraph 1 of this documentation.

2.1 Upload document

Description

The following endpoint is designed for uploading one ordinary file into the Workspace document library. The creation of the pdf-rendition will be done automatically if the file extension is supported.

Constraints

The total size of the request cannot exceed 1 GB.

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

File name and folder path can't contain any of invalid symbols: ", *, ., <, >, ?, /, \, |. In addition, the file name and the folders names can't start or end with dot. Folder path should have less than 400 symbols length including file name and extension. The maximum length of one folder name should be less than 260 symbols.

The list of the supported file extensions for automatic PDF-A rendition creation: doc, docx, epub, eml, htm, html, md, msg, odp, ods, odt, pps, ppsx, ppt, pptx, rtf, tif, tiff, xls, xlsx, xlsx.

API endpoint

Method	URL
POST	{BaseURL}/api/UploadDocument/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.
Content-Type	yes	multipart/form-data.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Request body

Key	Required?	Description
file	yes	Content of the file for upload.
metadata	yes	File metadata in JSOn format. More details in table below.

Description of the file metadata JSOn

Field	Type	Required?	Details
description	string	no	Additional information about the file.
reference	string	no	References for the file.
committees	array	no	A list of committee's names related to the file.
reportType	int	no	Report type of the file. For more information, look at table report type values.
approvalStatus	int	no	Approval status of the file. For more information, look at the table approval status values.
approvalDeadline	string	no	Deadline for the file approval. Mandatory if the approval status field value is 1 (for approval).
approvedOrRejectedDate	string	no	Date and time when the file was approved or rejected. Mandatory if the approval status field value is 2 (approved) or 3 (rejected).
folderServerRelativeURL	string	yes	Server relative URL of the destination folder which will contain the file. If a folder or folders don't exists, they will be created, if a user who is calling the API endpoint has sufficient permissions.
isUpdateExisting	bool	no	Default value is true.

			If the file already exists in the destination folder and the value is true, a new version will be added, otherwise the file will be uploaded as a separate copy.
--	--	--	--

Report type values

Value	Description
0	None
1	DPR
2	DDR

Approval status values

Value	Description
0	NotForApproval
1	ForApproval
2	Approved
3	Rejected

Response header values

Header	Value
Content-Type	text/plain.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the file uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-12s.collabor8.no/api/UploadDocument/pl2008_API

File: API_Test.docx.

File metadata JSON:

```
{  
  "description": "Complete description of test file.",  
  "reference": "References for test file.",  
  "committees": ["Commercial Committee"],  
  "reportType": 1,  
  "approvalStatus": 1,  
  "approvalDeadline": "2022-08-20",  
  "folderServerRelativeURL": "sites/pl2008_API/Main/Projects/Other/Test"  
}
```

Response example

Body:

<https://apis-test-12s.collabor8.no/api/RequestStatus/b51f9054-6f1a-ed11-b83e-0022489d6648>

2.2 Upload Cash Call document

Description

The following endpoint is designed for transformation of one XML file into XLSX file with further uploading into the Workspace document library. The creation of pdf-
rendition will be done automatically.

Constraints

The total size of the request cannot exceed 100 MB.

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Year of the document must be in range 1900 ... 2100.

Month of the document must be in range 01 ... 12.

Standard template of a file name is

CashCall_{WorkspaceName}_{Category(optional)}_{YYYYMM}.xml.

The file name can't contain any of invalid symbols: ", *, :, <, >, ?, /, \, |. Also, the file name can't start or end with dot. All valid special symbols should be encoded.

The XML file must be UTF-8 encoded and escape-characters must be handled. The services do not handle the characters like æ, ø, å, §, etc. If this is not accounted for, the result could be document names, descriptions etc. containing the character '?'.
'

API endpoint

Method	URL
POST	{BaseURL}/api/CashCalls/{WorkspaceName}/{Year}/{Month}/{FileName}

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	Yes	Name of the workspace to work with.
Year	Yes	Year of the document.
Month	Yes	Month of the document.
FileName	Yes	File name of the document.

Request body

Contains only the content of the XML file.

Response header values

Header	Value
Content-Type	text/plain.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the document transformation and uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/CashCalls/pl2008_API/2022/08/CashCall_pl2008_API_202208.xml

File: API_Test.xml.

Response example

Body:

<https://apis-test-l2s.collabor8.no/api/RequestStatus/b54d17d3-741a-ed11-b83e-0022489e5b90>

2.3 Upload Billing document

Description

The following endpoint is designed for transformation one XML file into XLSX file with the further uploading into the Workspace document library. The creation of pdf-
rendition will be done automatically.

Constraints

The total size of the request cannot exceed 100 MB.

Special characters in the workspace name, like '/', must be URL-encoded two times.

For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Year of the document must be in range 1900 ... 2100.

Month of the document must be in range 01 ... 12.

Standard file name template is

Billing_{WorkspaceName}_{Category(optional)}_{YYYYMM}.xml.

File name can't contain any of invalid symbols: ", *, :, <, >, ?, /, \, |. Also, file name can't start or end with dot. All valid special symbols should be encoded.

The XML file must be UTF-8 encoded and escape-characters must be handled. The services do not handle the characters like æ, ø, å, § etc. If this is not accounted for, the result could be document names, descriptions etc. containing the character '?'.
?

API endpoint

Method	URL
POST	{BaseURL}/api/Billings/:WorkspaceName/:Year/:Month/:FileName

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	Yes	Name of the workspace to work with.
Year	Yes	Year of the document.
Month	Yes	Month of the document.
FileName	Yes	File name of the document according to the standard

Request body

Contains only the content of the XML file.

Response header values

Header	Value
Content-Type	text/plain.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the document transformation and uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/Billings/pl2008_API/2022/08/Billings_pl2008_API_202208.xml

File: API_Test.xml.

Response example

Body:

<https://apis-test-l2s.collabor8.no/api/RequestStatus/1d7e9325-761a-ed11-b83e-0022489d6b36>

2.4 Upload document rendition

Description

The following endpoint is designed for uploading one PDF file as a rendition for the existing file in the Workspace document library.

Constraints

The total size of the request cannot exceed 100 MB.

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

API endpoint

Method	URL
POST	{BaseURL}/api/UploadDocumentRendition/:WorkspaceName/:DocumentId

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.
Content-Type	Yes	application/pdf.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	Yes	Name of the workspace to work with.
DocumentId	Yes	Standard Sharepoint document identifier of the file for which rendition is uploading.

Request body

Contains only the content of the PDF file.

Response

HTTP status	Body value
201	Empty
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/UploadDocumentRendition/p12008_API/ER4XZVPMZY55-1766936424-53

File: API_Test.pdf.

Response example

Body: Empty

2.5 Request status for upload tasks

Description

The following endpoint is designed for checking the status of various asynchronous operations. The current section is related to transformation or uploading the file into the Workspace document library.

Constraints

Ticket Id has short lifetime, and it is available only for 1 day after creation.

If a file extension is not supported by automatic PDF-rendition creation, the final successful status will be 'UploadCompleted', otherwise the status will be 'CompletedWithLatestRendition'.

If the file extension can't be recognized, the response field 'fileType' will be set to the value 0 (Undefined).

Only the user who started the operation can request the status of the operation.

These tasks are running in the background and need some time to complete. Use the following endpoint to check status of each task once in a minute to prevent throttling.

API endpoint

Method	URL
GET	{BaseURL}/api/RequestStatus/:TicketId

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
TicketId	Yes	Unique identifier for tracking the process of the file transformation or uploading.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about the requested ticket identifier in JSON format. More details in table below.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSON

Field	Type	Details
requestId	string	Ticket unique identifier.
requestSubmittedAt	string	Date and time when the ticket was created.
updatedAt	string	Date and time when the ticket was last time modified.
totalExecutionTimeInSeconds	double	Total time elapsed for job execution.
workJobStatusType	int	Current job execution status. For more information, look at the table job status type values.
workJobStatusTypeString	string	Text representation of the current job execution status.
statusMessage	string	Human-friendly status description.
uploadMetadata	object	Included ticket metadata object. For more information, look at the table upload metadata JSON.

Job status type values

Value	Description
0	Not started
1	In progress
2	Upload completed
3	Completed with latest rendition
4	Failed
5	Company metadata collected
6	Meetings created
7	Documents metadata collected

Description of the upload metadata JSoN

Field	Type	Details
documentType	int	Document type of current upload operation. For more information, look at the table Document Type Values.
documentTypeAsString	string	Text representation of the document type.
jointVenture	string	The name of the workspace where the file was uploaded.
Year	int	Year. Presented only for CashCall and Billing document types.
Month	int	Month. Presented only for CashCall and Billing document types.
fileNamePrefix	string	File name without extension.
Files	array	A list of objects which contain information about all related files. For more information, look at the table File Object JSoN.

Document Type values

Value	Description
100000000	Cash call
100000001	Billing
100000002	Ordinary
100000003	Company metadata
100000004	Meetings creation
100000005	Documents metadata

Description of the file object JSON

Field	Type	Details
blobNameKey	int	Unique name with which file was uploaded to blob.
fileNamePrefix	string	File name without extension.
filename	string	Full file name.
filetype	int	File extension type. For more information see table file type values.
fileTypeString	int	Text representation of the file extension type.
fileId	string	Standard Sharepoint document identifier of the file which was uploaded.
Version	int	Current version of the file.
versionAdded	bool	True if a new version of the existing file was uploaded.
Uploaded	bool	True if the file was successfully uploaded.
renditionCompleted	bool	True if the pdf-rendition was successfully created.

File type values

Value	Description
0	Undefined
1	Xml
2	Pdf
3	Xlsx

Request example

URL: <https://apis-test-l2s.collabor8.no/api/RequestStatus/1d7e9325-761a-ed11-b83e-0022489d6b36>

Response example

Body:

```
{
  "requestId": "1d7e9325-761a-ed11-b83e-0022489d6b36",
  "requestSubmittedAt": "2022-08-12T19:37:11+00:00",
  "updatedAt": "2022-08-12T19:39:00+00:00",
  "totalExecutionTimeInSeconds": 109.0,
  "workJobStatusType": 3,
  "workJobStatusTypeString": "CompletedWithLatestRendition",
  "statusMessage": null,
  "uploadMetadata": {
    "documentType": 100000001,
    "documentTypeAsString": "Billing",
    "jointVenture": "pl2008_API",
    "year": 2022,
    "month": 8,
    "fileNamePrefix": "Billings_pl2008_API_202208",
    "files": [
      {
        "blobNameKey": "Billings_pl2008_API_202208.xml
1d7e9325-761a-ed11-b83e-0022489d6b36",
        "fileNamePrefix": "Billings_pl2008_API_202208",
        "fileName": "Billings_pl2008_API_202208.xml",
        "fileType": 1,
        "fileTypeString": "xml",
        "fileId": "ER4XZVPMZY55-1766936424-51",
        "version": 1,
        "versionAdded": false,
```

```

        "uploaded": true,
        "renditionCompleted": false
    },
    {
        "blobNameKey": "Billings_pl2008_API_202208.xlsx
1d7e9325-761a-ed11-b 83e-0022489d6b36",
        "fileNamePrefix": "Billings_pl2008_API_202208",
        "fileName": "Billings_pl2008_API_202208.xlsx",
        "fileType": 3,
        "fileTypeString": "xlsx",
        "fileId": "ER4XZVPMZY55-1766936424-52",
        "version": 1,
        "versionAdded": false,
        "uploaded": true,
        "renditionCompleted": true
    },
    {
        "blobNameKey": null,
        "fileNamePrefix": "Billings_pl2008_API_202208",
        "fileName": "Billings_pl2008_API_202208.pdf",
        "fileType": 2,
        "fileTypeString": "pdf",
        "fileId": "ER4XZVPMZY55-1658986557-49",
        "version": 1,
        "versionAdded": false,
        "uploaded": true,
        "renditionCompleted": true
    }
]
}
}

```

2.6 Update document metadata

Description

The following endpoint is designed for updating metadata for one specified file in the Workspace document library.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

File name can't contain any of the invalid symbols: ", *, :, <, >, ?, /, \, |. Also, a file name can't start or end with dot.

If a new list of committee's names is provided, all previous committees in file metadata will be replaced with new one without comparing.

API endpoint

Method	URL
PATCH	{BaseURL}/api/UpdateDocumentMetadata/:WorkspaceName/:DocumentId

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.
Content-Type	yes	application/json.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.
DocumentId	yes	Standard Sharepoint document identifier of the file for which metadata update is required.

Description of the request body file metadata JSON

Field	Type	Required?	Details
documentName	string	no	New file name without extension.
description	string	no	New additional information about the file.
reference	string	no	New references for the file.
committees	array	no	A new list of committee names related to the file.
reportType	int	no	New report type of the file. For more information, look at the report type values.
approvalStatus	int	no	New approval status of the file. For more information, look at the table Approval Status Values.
approvalDeadline	string	no	New deadline for the file approval. Mandatory if an approval status field value is 1 (for approval).
approvedOrRejectedDate	string	no	New date and time when the file was approved or rejected. Mandatory if an approval status field value is 2 (approved) or 3 (rejected).

Report type values

Value	Description
0	None
1	DPR
2	DDR

Approval status values

Value	Description
0	Not for approval
1	For approval
2	Approved
3	Rejected

Response

HTTP status	Body value
204	Empty.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/UpdateDocumentMetadata/pl2008_API/ER4XZVPMZY55-1766936424-53

Body:

```
{  
  "documentName": "New file name.",  
  "description": "New complete description of test file.",  
  "reference": "New references for test file.",  
  "committees": ["Management Committee"],  
  "reportType": 1,  
  "approvalStatus": 1,  
  "approvalDeadline": "2022-08-20T18:00:00.0000000+03:00",  
}
```

Response example

Body: Empty.

2.7 Get document comments

Description

The following endpoint is designed for getting the list of comments of the specified file.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Version of the file should be in format 1.0, 2.1, etc.

Content field value contains HTML tags in response comment.

API endpoint

Method	URL
GET	{BaseURL}/api/GetDocumentComments/:WorkspaceName/:DocumentId

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.
DocumentId	yes	Standard Sharepoint document identifier of the file for which comments are required.

Request query parameters

Query parameter	Required?	Value
ver	no	File version number. If the version is specified, the results will be filtered and return only comments related to provided version number.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about document comments in the JSON format. More details in table below.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSON

Field	Type	Details
workspace	string	Workspace name where document is located.
documentId	string	Standard Sharepoint document identifier of the file.
comments	array	A list of comment objects. For more information, look at the table Comment Object JSON.

Description of the comment object JSON

Field	Type	Details
version	string	Version of the file for which the comment was added.
title	string	Title of the comment.
content	string	Content of the comment
creator	string	An author of the comment.
company	string	Author's company.
createdDate	string	Date and time when the comment was added.

Request example

URL: https://apis-test-l2s.collabor8.no/api/GetDocumentComments/pl2008_API/ER4XZVPMZY55-1766936424-53?ver=2.0

Response example

Body:

```
{
  "workspace": "pl2008_API",
  "documentId": "ER4XZVPMZY55-1766936424-53",
  "comments": [
    {
      "version": "2.0",
      "title": "Document updated",
      "content": "<p>Hi. I added new information about project.</p>",
      "creator": "Integration System Account CEGAL AS",
      "company": "CEGAL AS",
      "createdDate": "2022-08-13T10:50:42Z"
    }
  ]
}
```

2.8 Create folder

Description

The following endpoint is designed for checking the existence and creating a folder or sequence of folders in the Workspace document library.

Constraints

Special characters in the workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

A folder path can't contain any of invalid symbols: ", *, :, <, >, ?, /, \, |. Folder names can't start or end with dots. Folder names shouldn't start or end with the dot. Folder server related URL should have less than 400 symbols length including document name and extension. The maximum length of one folder name should be less than 260 symbols.

API endpoint

Method	URL
POST	{BaseURL}/api/CreateFolder/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Description of the request body create folder JSON

Field	Type	Required?	Details
folderServerRelativeURL	string	yes	Folder path to check or create.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about existing folder path. For more details, look at the table Response Body Folder Exists JSON.
201	Information about created folder path. For more details, look at the table Response Body Folder Created JSON.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response body folder exists JSON

Field	Type	Details
existingFolderServerRelativeURL	string	Existing folder path.

Description of the response body folder created JSON

Field	Type	Details
createdFolderServerRelativeURL	string	Created folder path.

Request example

URL: https://apis-test-12s.collabor8.no/api/CreateFolder/pl2008_API

Body:

```
{
  "folderServerRelativeURL": "sites/pl2008_API/Main/Projects/Other/Test"
}
```

Response example

Body:

```
{
  "createdFolderServerRelativeURL": "sites/pl2008_API/Main/Projects/Other/Test"
}
```

2.9 Get message recipients

Description

The following endpoint is designed for retrieving information about all available message recipients in the Workspace.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

API endpoint

Method	URL
GET	{BaseURL}/api/GetMessageReceipients/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	A list with the information about message recipients. For more details, look at the table Response Body Message Recipients JSON.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response body message recipients JSON

Field	Type	Details
id	string	Unique identifier of a message recipient.
name	string	Name of a message recipient.
type	int	Recipient type. For more information, look at the table Recipient type values.

Recipient type values

Value	Description
0	Group
1	JVMember

Request example

URL: https://apis-test-l2s.collabor8.no/api/GetMessageRecepients/pl2008_API

Response example

Body:

```
[
  {
    "id": "89947df9-451a-ed11-b83e-000d3ad95a6c",
    "name": "pl2008_api-ltp_page-write",
    "type": 0
  },
  {
    "id": "9b947df9-451a-ed11-b83e-000d3ad95a6c",
    "name": "pl2008_api-operator-superuser",
    "type": 0
  },
  ...
  {
    "id": "96c0ef9c-541a-ed11-b83e-0022489d6c39",
    "name": "Integration System Account CEGAL AS (CEGAL AS)",
    "type": 1
  }
]
```


2.10 Send message about a document

Description

The following endpoint is designed for sending a message (creating a route) about a document or documents within one Workspace.

Constraints

Special characters in the workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Only documents from the same folder can be sent in one message.

API endpoint

Method	URL
POST	{BaseURL}/api/SendMessage/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Description of the request body send message (route) JSON

Field	Type	Required?	Details
category	int	yes	Message (route) category. For more information, look at the table Message (route) category type values.
dueDate	string	no	Due date for message (route).
message	string	no	Custom text message. Could contain HTML.
relatedRouteId	string	no	A unique identifier of message (route) which was already sent and related to current message (route).
documentIds	array	yes	A list of standard Sharepoint document identifiers strings of the files for which message (route) should be sent.
toRecipients	array	yes	A list To Recipients Objects. For more information, look at the table Recipient Object JSON.
ccRecipients	array	no	A list of cc recipients objects. For more information, look at the table Recipient object JSON.
authorityReference	string	no	Message (route) authority reference. Could be specified for a message (route) within CC/CAC type Workspace.
companyReference	string	no	Message (route) company reference. Could be specified for a message (route) within CC/CAC type Workspace.
title	string	no	The title of the message (route). Mandatory for sending message (route) within CC/CAC type Workspace.

Message (route) category type values

Value	Description
100000000	For action
100000001	For info
100000002	Reminder
100000003	New comment
100000004	Authority

Description of the recipient object JSON

Field	Type	Details
id	string	Unique identifier of a message recipient.
name	string	Name of a message recipient.
type	int	Recipient type. For more information, look at the table Recipient type values.

Recipient type values

Value	Description
0	Group
1	JVMember

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
201	Information about a message (route) which was sent. For more details, look at the table Response send message (route) JSON.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response body send message (route) JSoN

Field	Type	Details
routeId	string	A unique identifier of message (route) which was sent.

Request example

URL: https://apis-test-l2s.collabor8.no/api/SendMessage/pl2008_API

Body:

```
{
  "category": 100000000,
  "dueDate": "2022-08-25T18:00:00.0000000+03:00",
  "message": "Route message",
  "documentIds": [
    "ER4XZVPMZY55-1766936424-53"
  ],
  "toRecipients": [
    {
      "id": "89947df9-451a-ed11-b83e-000d3ad95a6c",
      "name": "pl2008_api-ltp_page-write",
      "type": 0
    }
  ],
  "ccRecipients": [
    {
      "id": "c0eab4f7-451a-ed11-b83e-0022489d6648",
      "name": "pl2008_api-committees",
      "type": 0
    }
  ]
}
```

Response example

Body:

```
{  
  "routeId": "0800310b-f522-ed11-b83d-0022489e5230"  
}
```

2.11 Get metadata about company's content

Description

The following endpoint is designed for generating a JSON file with metadata about the content of one Workspace.

Constraints

Special characters in the workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Generated JSON file will contain only information about content metadata to which the current user has access.

Query parameters could be used in any combination.

Relative server URL of the folder for which metadata need to be collected, mustn't be encoded.

API endpoint

Method	URL
GET	{BaseURL}/api/GetCompanyMetadata/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Request query parameters

Query parameter	Required?	Value
date	no	Complete date in ISO 8601 format. If specified will collect items which have last modified date greater or equal to provided date, otherwise will collect all items from workspace.
permissions	no	If true will collect permissions for libraries, folders and files.
versions	no	If true will collect information about all available libraries versions of files.
folder	no	Relative server URL of the folder for which metadata need to be collected.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the file uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request examples:

- 1) Request without any query parameter. Will collect all metadata from provided Workspace without permissions and file versions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API

- 2) Request with query parameter “permission” which set to true. Will collect all metadata from provided Workspace with permissions, but without file versions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API?permissions=true

- 3) Request with query parameter “versions” which set to true. Will collect all metadata from provided Workspace with file versions, but without permissions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API?versions=true

- 4) Request with query parameter “date”. Will collect all metadata from provided Workspace, which were created or modified after specified date, without permissions and file versions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API?date=2022-09-16

- 5) Request with query parameter “folder”. Will collect all metadata from provided Workspace, which located inside of specified folder, without permissions and file versions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API?folder=/sites/pl2008_API/Main/Projects

- 6) Request with all query parameters. Will collect all metadata from provided Workspace, which located inside of specified folder, which were created or modified after specified date, with permissions and file versions.

URL: https://apis-test-12s.collabor8.no/api/GetCompanyMetadata/pl2008_API?date=2022-09-16&permissions=true&versions=true&folder=/sites/pl2008_API/Main/Projects

Response example

Body:

<https://apis-test-12s.collabor8.no/api/RequestStatus/b51f9054-6f1a-ed11-b83e-0022489d6648>

2.12 Request status for get company's metadata task

Description

The following endpoint is designed for checking the status of various asynchronous operations. The current section is related to collecting company's content metadata from Workspace.

Constraints

Ticket Id has short lifetime, and it is available only 1 day after creation.

Only the user who started the operation can request the status of the operation.

These tasks are running in the background and need some time to complete. Use the following endpoint to check status of each task once in a minute to prevent throttling.

API endpoint

Method	URL
GET	{BaseURL}/api/RequestStatus/:TicketId

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
TicketId	Yes	Unique identifier for tracking the process of collecting company`s content metadata.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about the requested ticket identifier in JSON format. More details in the table below.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSoN

Field	Type	Details
requestId	string	Ticket unique identifier.
requestSubmittedAt	string	Date and time when the ticket was created.
updatedAt	string	Date and time when the ticket was last time modified.
totalExecutionTimeInSeconds	double	Total time elapsed for job execution.
workJobStatusType	int	Current job execution status. For more information, look at the table job status type values.
workJobStatusTypeString	string	Text representation of the current job execution status.
statusMessage	string	Human-friendly status description.
documentType	int	Document type of current operation. For more information, look at the table Document Type Values.
documentTypeAsString	string	Text representation of the document type.
metadata	object	Included ticket metadata object. For more information, look at the table metadata JSoN.

Job status type values

Value	Description
0	Not started
1	In progress
2	Upload completed
3	Completed with latest rendition
4	Failed
5	Company metadata collected
6	Meetings created
7	Documents metadata collected

Description of the metadata JSoN

Field	Type	Details
-------	------	---------

workspace	object	A workspace object. For more information, look at the table Workspace object JSON.
-----------	--------	--

Description of the workspace object JSON

Field	Type	Details
id	string	A unique identifier of the workspace.
name	string	A name of the workspace.
url	string	An URL of the workspace.
status	int	A status of the workspace. For more information, look at the table Status Values.
libraries	array	A list of the library objects of the workspace. Will be populated with data only if query parameter “folder” wasn’t passed with the GetCompanyMetadata request. For more information, look at the table Library object JSON.
folder	object	An object which contains metadata collected for specified folder in the request. Will be populated with data only if query parameter “folder” was passed with the GetCompanyMetadata request. For more information, look at the table Folder scoped metadata object JSON.

Status values

Value	Description
0	Not set
100000000	Active
100000001	Inactive
100000002	Archived
100000003	Relinquished

Description of the library object JSoN

Field	Type	Details
name	string	A name of the library.
permissions	object	An object which contains information about library's permissions. Will be populated only if query parameter "permissions" was passed with the GetCompanyMetadata request. For more information, look at the table Item permission object JSoN.
folders	array	A list of the folder objects of the library. Will be populated only if query parameter "date" wasn't passed with the GetCompanyMetadata request. For more information, look at the table Folder object JSoN. If library doesn't have any folders will be set to null.
listOfChanges	object	An object which contains information about library's items which were modified in specified period. Will be populated only if query parameter "date" was passed with the GetCompanyMetadata request. For more information, look at the table List of changes object JSoN.

Description of the List of changes object JSoN

Field	Type	Details
dateFrom	string	A complete date in ISO 8601 format, which was used to filter items by last modified date property.
folders	array	A plain list of the folder objects of the library which were modified in specified period. For more information, look at the table Folder object JSoN.
files	array	A plain list of the file objects of the library which were modified in specified period. For more information, look at the table File object JSoN.

Description of the folder object JSoN

Field	Type	Details
name	string	A name of the folder.
parentFolderPath	string	Relative parent folder url.
permissions	object	An object which contains information about library's permissions. Will be populated only if query parameter "permissions" was passed with the GetCompanyMetadata request. For more information, look at the table Item permission object JSoN..
folders	array	A list of the child folder objects of the folder. For more information, look at the table Folder Object JSoN. If a folder doesn't have any child folders, the field will be set to null.
files	array	A list of the file objects of the folder. For more information, look at the table File object JSoN. If folder doesn't have any files, the filed will be set to null.

Description of the file object JSoN

Field	Type	Details
parentFolderPath	string	Relative parent folder url.
metadata	object	An object which contains information about file's metadata. For more information, look at the table File Metadata Object JSoN
permissions	object	An object which contains information about library's permissions. Will be populated only if query parameter "permissions" was passed with the GetCompanyMetadata request. For more information, look at the table Item permission object JSoN.

Description of the item permission object JSON

Field	Type	Details
isInherited	bool	If an item's permission inheritance is broken, the field will be set to false, otherwise true.
grantedGroups	array	A list of strings which contains names of workspace groups which has access to the item. If the item inherits permissions, the field will be set to null.

Description of the Folder scoped metadata object JSON

Field	Type	Details
name	string	A name of the folder.
parentFolderPath	string	Relative parent folder url.
permissions	object	An object which contains information about library's permissions. Will be populated only if query parameter "permissions" was passed with the GetCompanyMetadata request. For more information, look at the table Item permission object JSON..
folders	array	A list of the child folder objects of the folder. For more information, look at the table Folder Object JSON. If a folder doesn't have any child folders, the field will be set to null.
files	array	A list of the file objects of the folder. For more information, look at the table File object JSON. If folder doesn't have any files, the field will be set to null.
listOfChanges	object	An object which contains information about folder's items which were modified in specified period. Will be populated only if query parameter "date" was passed with the GetCompanyMetadata request. For more information, look at the table List of changes object JSON.

Description of the file metadata object JSoN

Field	Type	Details
name	string	Full file name with extension.
documentId	string	Standard Sharepoint document identifiers of the file.
currentVersion	string	Latest available version of the file.
createdBy	string	Author of the file.
createdOn	string	Date of creation of the file.
modifiedBy	string	Last editor of the file.
modifiedOn	string	Date of the last modification of the file.
originatorCompany	string	Author's company name.
fileSize	string	File size in bytes.
description	string	Additional information about the file.
reference	string	References for the file.
committees	array	A list of committee names related to the file.
commentsCount	int	Total count of the comments related to the file.
pdfRenditionURL	string	A link to the file's PDF rendition, if it exists.
reportType	int	Report type of the file. For more information, look at the report type values.
reportTypeStr	string	Text representation of the report type value.
approvalStatus	int	Approval status of the file. For more information, look at the table Approval status values.
approvalStatusStr	string	Text representation of the approval status value.
approvalDeadline	string	Deadline for the file approval.
approvedOrRejectedDate	string	Date and time when the file was approved or rejected.

Report type values

Value	Description
0	None
1	DPR

2	DDR
---	-----

Approval status values

Value	Description
0	Not for approval
1	For approval
2	Approved
3	Rejected

Request example

URL: <https://apis-test-l2s.collabor8.no/api/RequestStatus/1d7e9325-761a-ed11-b83e-0022489d6b36>

Response example

Body:

```
{
  "documentType": 100000003,
  "documentTypeAsString": "CompanyMetadata",
  "requestId": "b172323a-6124-ed11-b83d-0022489e5d89",
  "requestSubmittedAt": "2022-08-25T10:32:38+00:00",
  "updatedAt": "2022-08-25T10:35:04+00:00",
  "totalExecutionTimeInSeconds": 146.0,
  "workJobStatusType": 5,
  "workJobStatusTypeString": "CompanyMetadataCollected",
  "statusMessage": null,
  "metadata": {
    "workspace": {
      "id": "252af7d2-451a-ed11-b83e-0022489e52d6",
      "name": "pl2008_API",
      "url": "https://l2stest.sharepoint.com/sites/pl2008_API",
      "status": "100000000",
      "libraries": [
        {
```

```

"name": "Main",
"permissions": {
  "isInherited": false,
  "grantedGroups": [
    "pl2008_api-operator-read",
    "pl2008_api-partner-read",
    "pl2008_api-authorities-read",
    "pl2008_api-mc-chair",
    "pl2008_api-procurement",
    "pl2008_api-jv-admin",
    "pl2008_api-company-admins"
  ]
},
"folders": [
  {
    "name": "Procurement",
    "permissions": {
      "isInherited": true,
      "grantedGroups": null
    },
    "folders": [
      {
        "name": "01",
        "permissions": {
          "isInherited": true,
          "grantedGroups": null
        },
        "folders": null,
        "files": [
          {
            "metadata": {
              "name": "05.txt",

```

```
"documentId": "ER4XZVPMZY55-1766936424-75",
"currentVersion": "0.1",
"createdBy": null,
"createdOn": "2022-08-22T16:43:12",
"modifiedBy": null,
"modifiedOn": "2022-08-22T16:43:12",
"originatorCompany": null,
"fileSize": 0,
"description": "ER4XZVPMZY55-1766936424-75",
"reference": null,
"committees": null,
"commentsCount": null,
"pdfRenditionURL": null,
"reportType": null,
"reportTypeStr": "",
"approvalStatus": 0,
"approvalStatusStr": "NotForApproval",
"approvalDeadline": null,
"approvedOrRejectedDate": null
},
"permissions": {
  "isInherited": true,
  "grantedGroups": null
}
}
]
}
]
}
]
}
]
```

```

    }
  }
}

```

2.13 Download document

Description

The following endpoint is designed for downloading a specified file content from the Workspace.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Version of the file should be in format 1.0, 2.1, etc.

API endpoint

Method	URL
GET	{BaseURL}/api/DownloadDocument/:WorkspaceName/:DocumentId

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.
DocumentId	yes	Standard Sharepoint document identifier of the document for which comments are required.

Request query parameters

Query parameter	Required?	Value
ver	no	File version number which must be downloaded. If not specified will download the latest version.
rendition	no	If true will download file's pdf-rendition.

Response header values

Header	Value
Content-Type	application/octet-stream.

Response

HTTP status	Body value
200	Content of requested file.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/DownloadDocument/pl2008_API/ER4XZVPMZY55-1766936424-53?ver=2.0&rendition=true

Response example

File: content of the second version of the pdf-rendition of the requested file.

2.14 Download Cash Call documents

Description

The following endpoint is designed for downloading CashCall documents from the Workspace document library.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Year of the document must be in range 1900 ... 2100.

Month of the document, if specified, must be in range 01 ... 12.

From the original Cash Call folder, only files with the following extensions are collected: xml, xlsx.

Only files with the following extensions will be retrieved from the Cash Call rendition folder: pdf.

If some files are missing or empty, they will be skipped in the response.

API endpoint

Method	URL
GET	{BaseURL}/api/CashCalls/:WorkspaceName/:Year/:Month/

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.
Year	yes	Year of the document.
Month	no	Month of the document. If not specified, all documents for the requested year will be downloaded.

Request query parameters

Query parameter	Required?	Value
type	no	Will filter results and return only files with specified file extensions. If not specified all files will be downloaded.

Response header values

Header	Value
Content-Type	application/zip.

Response

HTTP status	Body value
200	Zip-file with collected files.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/CashCalls/pl2008_API/2022

Response example

File: content of zip-file.

Zip-file structure:

```
2022/
|- 01/
|  |- CashCallDocument01.xml
|  |- CashCallDocument01.xlsx
|  |- CashCallDocument01.pdf
...
|- 12/
|  |- CashCallDocument12.xml
|  |- CashCallDocument12.xlsx
|  |- CashCallDocument12.pdf
```


2.15 Download Billing documents

Description

The following endpoint is designed for downloading Billing documents from the Workspace document library.

Constraints

Special characters in workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Year of the document must be in such range 1900 ... 2100.

Month of the document, if specified, must be in such range 01 ... 12.

From the original Cash Call folder, only files with the following extensions are collected: xml, xlsx.

Only files with the following extensions will be retrieved from the Cash Call rendition folder: pdf.

If some files are missing or empty, they will be skipped in the response.

API endpoint

Method	URL
GET	{BaseURL}/api/Billings/:WorkspaceName/:Year/:Month/

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.
Year	yes	Year of the document.
Month	no	Month of the document. If not specified, all documents for the requested year will be downloaded.

Request query parameters

Query parameter	Required?	Value
type	no	Will filter results and return only files with specified file extensions. If not specified, all files will be downloaded.

Response header values

Header	Value
Content-Type	application/zip.

Response

HTTP status	Body value
200	Zip-file with collected files.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-l2s.collabor8.no/api/Billings/pl2008_API/2022/08?type=xlsx&type=pdf

Response example

File: content of zip-file.

Zip-file structure:

```
2022/  
  |- 08/  
    |- BillingDocument08.xlsx  
    |- BillingDocument08.pdf
```

2.16 Health check

Description

The following endpoint is designed for checking the overall status of the API.

API endpoint

Method	URL
GET	{BaseURL}/api/HealthCheck

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about API components in JSON format. For more details, look at the table Response Body Health Check JSON.
500, 503	Fault message with internal error details.

Description of the response body health check JSON

Field	Type	Details
status	string	Overall API status.
healthChecks	array	A list with status object of each API component. For more details, look at the table Component Status Object JSON.

Description of the component status object JSON

Field	Type	Details
status	string	Status of the API component.
component	string	Component name
description	string	Detailed description of the status if needed.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/HealthCheck>

Response example

Body:

```
{
  "status": "Healthy",
  "healthChecks": [
    {
      "status": "Healthy",
      "component": "Dataverse",
      "description": null
    }
  ]
}
```

2.17 Test

Description

The following endpoint is designed for testing API authentication.

API endpoint

Method	URL
GET	{BaseURL}/api/Test

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Response header values

Header	Value
Content-Type	text/plain.

Response

HTTP status	Body value
200	Client Id of the user who invoke API method.
401	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/Test>

Response example

Body: You are calling API under Service Principal with Client Id 00000000-0000-0000-0000-000000000000.

2.18 Get active workspaces

Description

The following endpoint is designed for retrieving information about all active user's Workspaces.

API endpoint

Method	URL
GET	{BaseURL}/api/JointVentures

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	A list with the information about user's active workspaces. For more details, look at the table Response Body Joint Ventures JSON.
401, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response body joint ventures JSON

Field	Type	Details
id	string	Unique identifier of a workspace.
name	string	Name of a workspace.
permissionGroup	string	User's permission in a workspace.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/JointVentures>

Response example

Body:

```
[
  {
    "id": "252af7d2-451a-ed11-b83e-0022489e52d6",
    "name": "pl2008_API",
    "permissionGroup": "Operator-SuperUser"
  },
  {
    "id": "75e98ced-6422-ed11-b83d-0022489e5107",
    "name": "pl2008_API10000",
    "permissionGroup": "Operator-SuperUser"
  },
  ...
  {
    "id": "86c9b4d5-6d11-ed11-b83d-000d3adcae59",
    "name": "pl2008_4",
    "permissionGroup": "Partner-Write"
  }
]
```

2.19 Get committees list

Description

The following endpoint is designed for downloading an excel document, which contains information about L2S committees.

API endpoint

Method	URL
GET	{BaseURL}/api/GetCommitteesList

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Response header values

Header	Value
Content-Type	application/vnd.openxmlformats-officedocument.spreadsheetml.sheet.

Response

HTTP status	Body value
200	The content of the excel document, which contains information about L2S committees.
401, 403	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/GetCommitteesList>

Response example

File: the content of the excel document, which contains information about L2S committees.

2.20 Get JV admins and Super users list

Description

The following endpoint is designed for downloading a csv document, which contains information about L2S JV admins and Super users list.

API endpoint

Method	URL
GET	{BaseURL}/api/GetJVAdminsSuperUsersList

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Response header values

Header	Value
Content-Type	text/csv.

Response

HTTP status	Body value
200	The content of the csv document which contains information about L2S JV admins and Super users list.
401, 403	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/GetJVAdminsSuperUsersList>

Response example

File: the content of the csv document which contains information about L2S JV admins and Super users list.

2.21 Get documents with latest comments

Description

The following endpoint is designed for generating a JSON file, which contains documents with metadata and comments from one company's Workspace.

Constraints

Special characters in the workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

The generated JSON file will contain only information about documents to which the current user has access.

API endpoint

Method	URL
GET	{BaseURL}/api/GetDocumentsMetadata/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Request query parameters

Query parameter	Required?	Value
date	no	Complete date in ISO 8601 format. If specified will collect comments, which have created date greater or equal to provided date, otherwise will collect all comments from workspace.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the file uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-12s.collabor8.no/api/GetDocumentsMetadata/pl2008_API?date=2023-01-04

Response example

Body:

<https://apis-test-12s.collabor8.no/api/RequestStatus/b51f9054-6f1a-ed11-b83e-0022489d6648>

2.22 Get Group Memberships

Description

The following endpoint is designed for retrieving JV group membership details of one or more users.

Constraints

The endpoint will only return users and group memberships for users in your own company, from joint ventures where the integration system account has access.

This means that this will only return groups that are related to a particular JV. So this will not return company groups (ar-groups, company admin, SMIL) or authority read all groups (xxx-all-jvs).

API Endpoint

Method	URL
GET	{BaseURL}/api/GetGroupMemberships

Request Header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request Query Parameters

Header	Required?	Value
user	no	UPN of the user ex.onmicrosoft.com#EXT#@domain.onmicrosoft.com
ju	no	Workspace name (ex PL123)
type	no	committee, workspace, workgroup
include_groups	no	true, false (default)

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	A list with the information about user's active workspaces. For more details, look at the table Response Body Joint Ventures JSoN.
401, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSON

Field	Type	Details
users	array	Array of user objects
name	string	Users: Full name of the returned user
upn	string	Users: User principal name of the returned user
lastLogin	string	Users: Placeholder for a last login variable which is planned for a future release.
groups	array	Users: Array of group memberships for the returned user.
jv	string	groups: JV Name for the set of group memberships of the returned user
accessLevel	string	groups: highest access level role of the returned user within the returned jv
groups	array	groups: group name string array of the groups the returned user is member of in the returned JV

Request example

URL: <https://apis-test-l2s.collabor8.no/api/GetGroupMemberships?>

Returns all group memberships of a specific type within the defined joint venture for the defined user.

URL: <https://apis-test-l2s.collabor8.no/api/GetGroupMemberships>

Returns all users and all joint ventures this user has access to for all joint ventures the integration account has access to. include_groups is not defined here, so the group names are not listed, but the accessLevel is.

Response example

```
{
  "users":[
    {
      "name":"Demo User",
      "upn":"demo.user@test.com",
      "lastLogin":"2023-01-25T11:24:39",
      "groups":[
        {
          "jv":"PL123",
          "accessLevel":"superuser",
          "groups": ["pl123-operator-read","pl123-test-superuser","pl123-mc-chair"]
        },
        {
          "jv":"PL456",
          "accessLevel":"write",
          "groups": ["pl456-operator-read","pl456-test-write","pl456-wg-production"]
        }
      ]
    }
  ]
}
```

*This will be the date format of the lastLogin field. Until implemented it will return **null**.*

2.23 Request status for get documents with latest comments task

Description

The following endpoint is designed for checking the status of various asynchronous operations. The current section is related to collecting documents metadata, which have new comments, from Workspace.

Constraints

Ticket Id has short lifetime, and it is available only 1 day after creation.

Only the user who started the operation can request the status of the operation.

These tasks are running in the background and need some time to complete. Use the following endpoint to check status of each task once in a minute to prevent throttling.

API endpoint

Method	URL
GET	{BaseURL}/api/RequestStatus/:TicketId

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
TicketId	Yes	Unique identifier for tracking the process of collecting company`s content metadata.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about the requested ticket identifier in JSON format. More details in the table below.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSoN

Field	Type	Details
requestId	string	Ticket unique identifier.
requestSubmittedAt	string	Date and time when the ticket was created.
updatedAt	string	Date and time when the ticket was last time modified.
totalExecutionTimeInSeconds	double	Total time elapsed for job execution.
workJobStatusType	int	Current job execution status. For more information, look at the table job status type values.
workJobStatusTypeString	string	Text representation of the current job execution status.
statusMessage	string	Human-friendly status description.
documentType	int	Document type of current operation. For more information, look at the table Document Type Values.
documentTypeAsString	string	Text representation of the document type.
metadata	object	Included ticket metadata object. For more information, look at the table metadata JSoN.

Job status type values

Value	Description
0	Not started
1	In progress
2	Upload completed
3	Completed with latest rendition
4	Failed
5	Company metadata collected
6	Meetings created
7	Documents metadata collected

Description of the metadata JSoN

Field	Type	Details
-------	------	---------

workspace	object	A workspace object. For more information, look at the table Workspace object JSON.
-----------	--------	--

Description of the workspace object JSON

Field	Type	Details
id	string	A unique identifier of the workspace.
name	string	A name of the workspace.
url	string	An URL of the workspace.
status	int	The status of the workspace. For more information, look at the table Status Values.
documents	array	A list of the document objects of the workspace. For more information, look at the table Document object JSON.

Status values

Value	Description
0	Not set
100000000	Active
100000001	Inactive
100000002	Archived
100000003	Relinquished

Description of the file object JSON

Field	Type	Details
parentFolderPath	string	Relative parent folder URL.
metadata	object	An object which contains information about a file's metadata. For more information, look at the table File Metadata Object JSON
comments	array	An array of comment objects. For more information, look at the table Comment object JSON.

Description of the file metadata object JSoN

Field	Type	Details
name	string	Full file name with extension.
documentId	string	Standard Sharepoint document identifiers of the file.
currentVersion	string	Latest available version of the file.
createdBy	string	Author of the file.
createdOn	string	Date of creation of the file.
modifiedBy	string	Last editor of the file.
modifiedOn	string	Date of the last modification of the file.
originatorCompany	string	Author's company name.
fileSize	string	File size in bytes.
description	string	Additional information about the file.
reference	string	References for the file.
committees	array	A list of committee names related to the file.
commentsCount	int	Total count of the comments related to the file.
pdfRenditionURL	string	A link to the file's PDF rendition, if it exists.
reportType	int	Report type of the file. For more information, look at the report type values.
reportTypeStr	string	Text representation of the report type value.
approvalStatus	int	Approval status of the file. For more information, look at the table Approval status values.
approvalStatusStr	string	Text representation of the approval status value.
approvalDeadline	string	Deadline for the file approval.
approvedOrRejectedDate	string	Date and time when the file was approved or rejected.

Report type values

Value	Description
0	None
1	DPR

2	DDR
---	-----

Approval status values

Value	Description
0	Not for approval
1	For approval
2	Approved
3	Rejected

Description of the comment object JSON

Field	Type	Details
version	string	Version of the file for which the comment was added.
title	string	Title of the comment.
content	string	Content of the comment
creator	string	An author of the comment.
company	string	Author's company.
createdDate	string	Date and time when the comment was added.

Request example

URL: <https://apis-test-l2s.collabor8.no/api/RequestStatus/1d7e9325-761a-ed11-b83e-0022489d6b36>

Response example

Body:

```
{
  "documentType": 100000005,
  "documentTypeAsString": "DocumentsMetadata",
  "requestId": "475767c4-778c-ed11-81ad-0022489992ae",
  "requestSubmittedAt": "2023-01-04T21:36:02+00:00",
  "updatedAt": "2023-01-04T21:37:06+00:00",
  "totalExecutionTimeInSeconds": 64.0,
  "workJobStatusType": 7,
```

```
"workJobStatusTypeString": "DocumentsMetadataCollected",
"statusMessage": null,
"metadata": {
  "workspace": {
    "id": "252af7d2-451a-ed11-b83e-0022489e52d6",
    "name": "pl2008_API",
    "url": "https://12stest.sharepoint.com/sites/pl2008_API",
    "status": 100000000,
    "libraries": null,
    "folder": null,
    "documents": [
      {
        "parentFolderPath": "/sites/pl2008_API/Main/Financial/Cash
calls/2035/11",
        "metadata": {
          "name": "CashCall_pl2008_API_203511.xlsx",
          "documentId": "ER4XZVPMZY55-1766936424-493",
          "currentVersion": "0.2",
          "versions": null,
          "createdBy": "Integration System Account TIETOEVR Y NORWAY
AS 01 M2M",
          "createdOn": "2022-11-03T15:50:02+02:00",
          "modifiedBy": "Dev (TietoEVRY)",
          "modifiedOn": "2022-11-03T15:54:07+02:00",
          "originatorCompany": "unknown",
          "fileSize": 20443,
          "description": null,
          "reference": null,
          "committees": null,
          "commentsCount": 1,
          "pdfRenditionURL": null,
```

```

        "reportType": null,
        "reportTypeStr": "",
        "approvalStatus": 0,
        "approvalStatusStr": "NotForApproval",
        "approvalDeadline": null,
        "approvedOrRejectedDate": null
    },
    "comments": [
        {
            "version": "0.2",
            "title": "Good job!",
            "content": "<div data-wrapper=\"true\" style=\"font-size:9pt;font-family:'Segoe UI','Helvetica Neue',sans-serif;\"><div>Nice to have this report before the New Year.</div></div>",
            "creator": "# Dev",
            "company": null,
            "createdDate": "2023-01-04T19:47:52Z"
        }
    ]
}
]
}
}
}
}
}
}
}

```

2.24 Download folder content as a ZIP file

Description

The following endpoint is designed for downloading folder content as a ZIP file from Workspace.

Constraints

Special characters in the workspace name, like '/', must be URL-encoded two times. For example: 'PL01/PL02' will be 'PL01%252FPL02'.

Relative server URL of the folder for which need to be downloaded, mustn't be encoded.

API endpoint

Method	URL
GET	{BaseURL}/api/DownloadFolder/:WorkspaceName

Request header values

Header	Required?	Value
Authorization	yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
WorkspaceName	yes	Name of the workspace to work with.

Request query parameters

Query parameter	Required?	Value
folder	yes	Relative server URL of the folder which should be downloaded as a ZIP file.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	URL with the unique identifier for tracking the process of the file uploading.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Request example

URL: https://apis-test-12s.collabor8.no/api/DownloadFolder/pl2008_API?folder=/sites/pl2008_API/Main/Projects

Response example

Body:

<https://apis-test-12s.collabor8.no/api/RequestStatus/b51f9054-6f1a-ed11-b83e-0022489d6648>

2.25 Request status for download folder content as a ZIP file task

Description

The following endpoint is designed for checking the status of various asynchronous operations. The current section is related to downloading folder content as a ZIP file from Workspace.

Constraints

Ticket Id has short lifetime, and it is available only 1 day after creation.

Only the user who started the operation can request the status of the operation.

These tasks are running in the background and need some time to complete. Use the following endpoint to check status of each task once in a minute to prevent throttling.

API endpoint

Method	URL
GET	{BaseURL}/api/RequestStatus/:TicketId

Request header values

Header	Required?	Value
Authorization	Yes	Bearer access token.

Request path parameters

Path parameter	Required?	Description
TicketId	Yes	Unique identifier for tracking the process of collecting company`s content metadata.

Response header values

Header	Value
Content-Type	application/json.

Response

HTTP status	Body value
200	Information about the requested ticket identifier in JSON format. More details in the table below.
400, 401, 403, 404	Fault message with error details.
500, 503	Fault message with internal error details.

Description of the response JSoN

Field	Type	Details
requestId	string	Ticket unique identifier.
requestSubmittedAt	string	Date and time when the ticket was created.
updatedAt	string	Date and time when the ticket was last time modified.
totalExecutionTimeInSeconds	double	Total time elapsed for job execution.
workJobStatusType	int	Current job execution status. For more information, look at the table job status type values.
workJobStatusTypeString	string	Text representation of the current job execution status.
statusMessage	string	Human-friendly status description.
documentType	int	Document type of current operation. For more information, look at the table Document Type Values.
documentTypeAsString	string	Text representation of the document type.
zipArchiveDownloadURL	string	Included ticket metadata object. For more information, look at the table metadata JSoN.

Job status type values

Value	Description
0	Not started
1	In progress
2	Upload completed
3	Completed with latest rendition
4	Failed
5	Company metadata collected
6	Meetings created
7	Documents metadata collected
8	Zip archive created

Request example

URL: <https://apis-test-l2s.collabor8.no/api/RequestStatus/1d7e9325-761a-ed11-b83e-0022489d6b36>

Response example

Body:

```
{
  "documentType": 100000006,
  "documentTypeAsString": " FolderZipArchive ",
  "requestId": "475767c4-778c-ed11-81ad-0022489992ae",
  "requestSubmittedAt": "2023-01-04T21:36:02+00:00",
  "updatedAt": "2023-01-04T21:37:06+00:00",
  "totalExecutionTimeInSeconds": 64.0,
  "workJobStatusType": 8,
  "workJobStatusTypeString": " ZipArchiveCreated ",
  "statusMessage": null,
  "zipArchiveDownloadURL ": " https://nogl2ststpublicsa.blob.core.windows.net/nogl2sprdbackend-container/pl2008\_API\_25-01-2023--19-58-43.zip%207fb6a7aa-ea9c-ed11-aad1-002248993a0d?sv=2021-10-04&se=2023-01-25T20%3A29%3A20Z&sr=b&sp=r&sig=yt%2Fcf%2BwvxmmQwv8oBOwVbRjBZwZMT5L0Z27wmmTezx0%3D "
}
```

3 Swagger

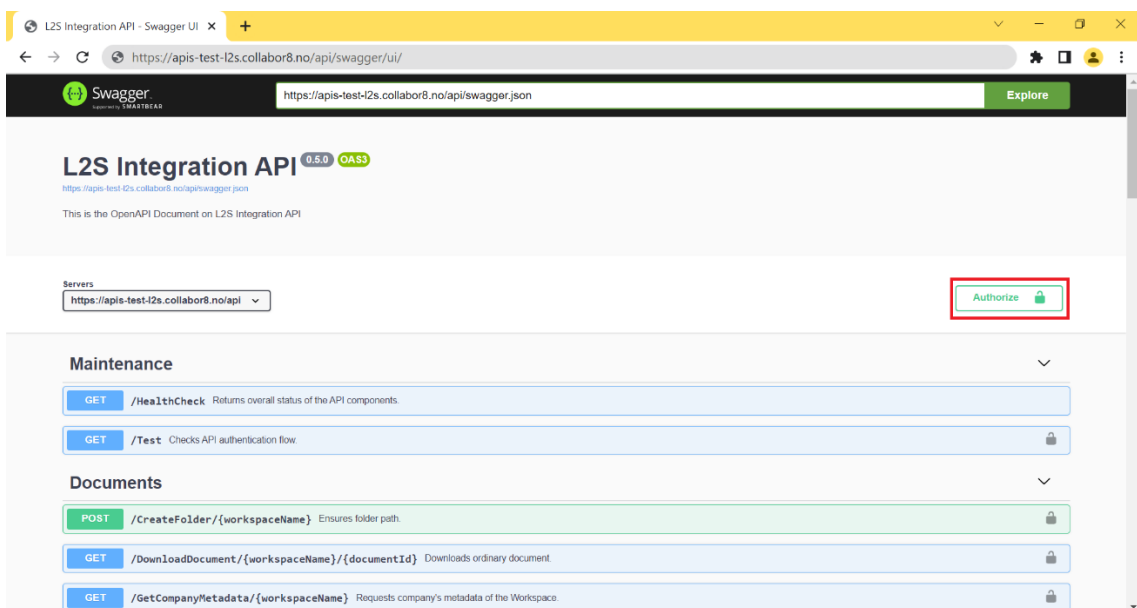
Integration API has a built-in Swagger functionality. To use Swagger documentation, the one needs to open Swagger UI using any browser by the following URL:

{BaseURL}/api/Swagger/UI

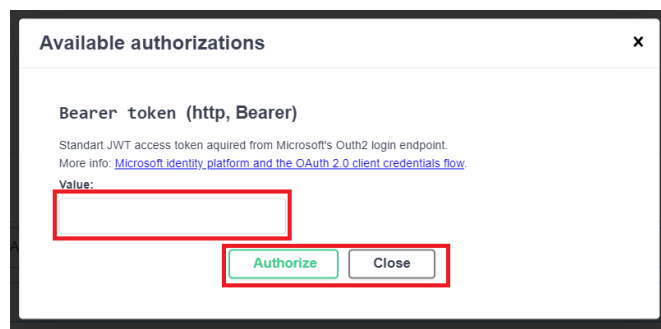
After the page will be loaded, the one could study the Integration API documentation and execute requests to the Integration API endpoints.

Please, be aware that the access token is mandatory to execute requests to the Integration API endpoints. To acquire access token, look at the section 1 of this documentation.

To provide the access token, click the button «Authorize» on the Swagger UI page.



Paste the access token value into the field on the pop-up window and click buttons «Authorize» and «Close».



Known issues

In the current implementation of the Swagger Upload CC&B document endpoints can't be executed regarding the issue with month number in endpoint path. In addition, for UploadRendition endpoint select file button is missing and file can't be added.

4 Examples

This section contains examples on how to call API endpoints via Postman.

4.1 Call Test endpoint via Postman

Prerequisites

- `{{Tenant ID}}` for Test environment, the value is: 6a2f7009-2835-4786-8853-2c5a5d637d13.
- `{{Application ID}}` for Test environment, the value is: 7048a0bb-6046-4c38-91da-f05361e5cbb3.
- `{{Base URL}}` for Test environment, the value is: <https://apis-test-12s.collabor8.no>.
- `{{Client ID}}` – your company service principal client ID.
- Certificate – your company's private part of the certificate.
- Certificate password - a password of the private part of the certificate.

Converting certificate into client assertion.

Use console application to generate client assertion from your company's certificate.

Update source code with your valid data and run console application. The client assertion in JWT format will be printed in console. Copy it for the next step.



Postman setup to obtain an access token.

Create a new POST request in Postman and enter the following URL in the request URL:

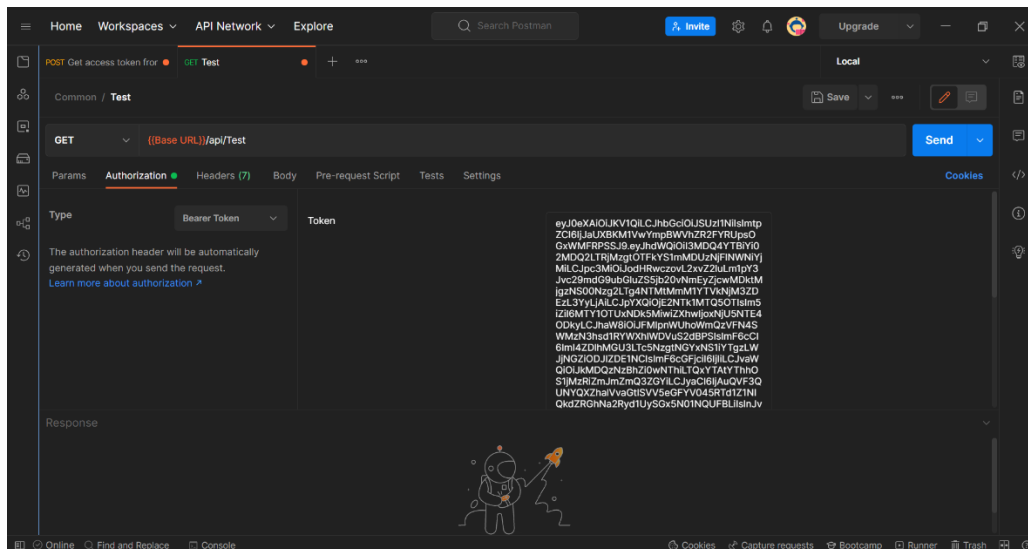
`https://login.microsoftonline.com/{{ Tenant ID }}/oauth2/v2.0/token`

Postman setup to call Test endpoint

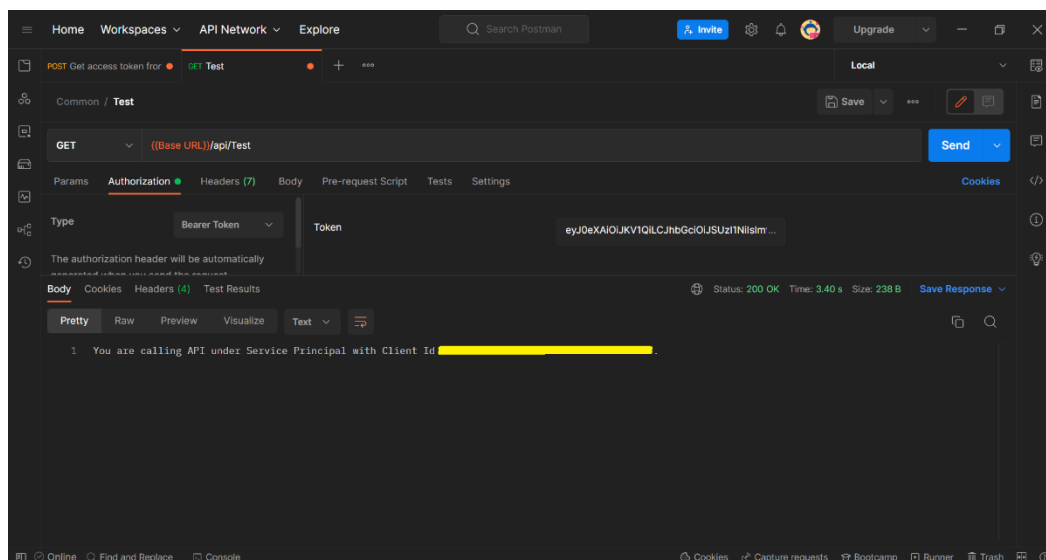
Create a new Get request in the Postman and enter the following URL in the request URL:

`{{Base URL}}/api/Test`

On Authorization tab, select “Bearer Token” from “Type” drop-down list and paste the access token value from previous step in Token field.



After you click on Send button, you will get the following response.



5 Links

1. <https://docs.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-client-creds-grant-flow>
2. <https://docs.microsoft.com/en-us/azure/active-directory/develop/active-directory-certificate-credentials>
3. <https://docs.microsoft.com/en-us/azure/active-directory/develop/msal-net-client-assertions#alternative-method>

6 Appendix

A.1 Console application for generating Client Assertion from the certificate.

```
using Microsoft.IdentityModel.JsonWebTokens;
using Microsoft.IdentityModel.Tokens;
using System;
using System.Collections.Generic;
using System.Security.Cryptography.X509Certificates;
namespace ClientAssertionGenerator
{
    public class Program
    {
        private const string _tenantId = "Tenant Id";
        private const string _clientId = "Service Principal Client Id";
        private const string _password = "test123";
        private const string _privateCertificatePath = "testexternalapi1.pfx";
        public static void Main()
        {
            var certificate = ReadCertificate();
            var clientAssertion = GetClientAssertion(certificate);
            Console.WriteLine(clientAssertion);
        }
        private static X509Certificate2 ReadCertificate()
        {
            var privateCertificate = new X509Certificate2(_privateCertificatePath, _password);
            return privateCertificate;
        }
        private static string GetClientAssertion(X509Certificate2 certificate)
        {
            var claims = new Dictionary<string, object>()
            {
                { "aud", $"https://login.microsoftonline.com/{_tenantId}/v2.0" },
                { "iss", _clientId },
                { "jti", Guid.NewGuid().ToString() },
                { "sub", _clientId }
            };
            var securityTokenDescriptor = new SecurityTokenDescriptor
            {
                Claims = claims,
                SigningCredentials = new X509SigningCredentials(certificate)
            };
            var handler = new JsonWebTokenHandler();
            var clientAssertion = handler.CreateToken(securityTokenDescriptor);
            return clientAssertion;
        }
    }
}
```