

Collabor8 Subsurface API Services

Getting started using
the Cloudbased services



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1 INTRODUCTION

The following document describes how to get started using the cloud based API services for the Collabor8 platform.

2 AUTHENTICATION AND USER INFORMATION

In order to start using the services there needs to be a cloud based user account defined.

A cloud based user account consists of 2 parts

1. The client id -> this is the unique identifier for the cloud based user, typically a long uuid based string
2. The client secret -> this is the credentials for the user

In order to use the API services you will also need to have a subscription key (Ocp-Apim-Subscription-Key) which is sent as part of all requests after successful authentication.

In order to use the services you will also need to make sure that the Azure user you are using is registered into the Collabor8 application itself with the correct roles and accesses applied.

2.1 Authenticating against Microsoft Azure

In order to use the API services for the Collabor8 platform you will need to have authentication token together with a subscription key as part of all of your calls to the API's. The Collabor8 platform is using OAUTH2 and client credentials for its cloud based services as an authentication mechanism. In order to authenticated and receive a token you will need to:

1. Create a post request to send to the Azure token service, the post request should contain the following keys as part of a form based .
 - a. grant_type -> should always be set to client_credentials
 - b. client_id -> the client id as described above for the user
 - c. client_secret -> the client secret as described above
 - d. resource -> the resource id to to authenticated against

If authentication is successful you will receive a token that should be used with all calls against the Collabor8 API's.

2.2 Authenticating and calling Collabor8 API services

When calling all Collabor8 API's you will need to provide the following information as part of the HTTP header for all requests

1. Authorization -> The bearer token received from Azure above, e.g. Authorization: Bearer <TOKEN FROM AZURE AUTHENTICATION>
2. Ocp-Apim-Subscription-Key -> the subscription key as described above

2.3 Getting hold of a Azure M2M user for the Collabor8 API services

In order to get hold of a Azure M2M account you will need to send a request to the Collabor8 servicedesk at: support.subsurface@collabor8.no.

As part of the request for a M2M account you need to specify for which company and also which environments and access that the user should have (e.g. for test environment and possibility to upload and download daily production data).

3 API DOCUMENTATION

Common examples of how you use and authenticate against the services are documented here: <https://subsurface-doc-apis.collabor8.no>. This documentation is a live document that we will continue to build further on as we add more examples on how to use the services. The same documentation also contains code examples in common languages and libraries on how to call the services from your favourite language.

4 SAMPLE CLIENT IMPLEMENTATION

As part of documenting the solution and making sure you have a good starting point for doing the technical part of the integration we also have a sample client library available here: <https://github.com/digitalcollaboration-collabor8/subsurfaceSampleClient>. This is a fully functional sample client implementation that can be used as a blue print for your own implementation showing important aspects around how to authenticate and query for data and at the same time e.g. normalize data over to e.g. a spreadsheet if needed.

5 IMPORTANT URL'S AND INFORMATION NEEDED TO USE THE COLLABOR8 SERVICES

5.1 Important common keys that are needed to work against the Collabor8 platform.

Key Name	Key Value	Description
resource	f6e80717-717a-4155-83f7-0b681df74e3d	The resource id to use for Azure OAuth authentication
tenantIdAzure	4d1df598-ac19-4734-86f0-8a645992dfa1	The id of the tenant to authenticate against in Azure

So to authenticate against Azure using client credentials the above keys should be part of the request.

5.2 Important URL's that are needed to work against the Collabor8 platform

Function	URL	Description
Azure authentication	<code>https://login.microsoftonline.com/{{tenantIdAzure}}/oauth2/token</code>	The URL to use for authentication. Note that you need to replace the tenantId with the tenantId described above
Collabor8 Test API's	<code>https://apis.collabor8.no/test</code>	The base URL to call the API's for the test environment
Collabor8 Production API's	<code>https://apis.collabor8.no/stable</code>	The base URL to call the API's for the production environment

5.3 Important service URL's

5.3.1 Test system URL's

URL	Description
https://apis.collabor8.no/test/api/Report/validate	Validate Report (DPR, MPRML, DDRML, Emissions)
https://apis.collabor8.no/test/api/Report/upload	Upload Report (DPR, MPRML, DDRML, Emissions)
https://apis.collabor8.no/test/graph	Run queries for data using GraphQL
https://apis.collabor8.no/test/api/Files/{fileId}	Get a physical report file with the given id and format
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/{reportingObjectId}/workflow/commands	Get available RNB workflow commands for a given reporting object specified through the use of the id as part of the url
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/businessRules	Get all available business rules used as part of the validation sequence for RNB data
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/download	Download RNB scope Excel report for specified reporting objects, where reporting objects to include are specified as a query parameter named,

	“reportingObjectsIds” and where different reporting objects ids are separated using comma.
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/template/download	Download empty RNB scope excel template
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/{reportingObjectId}/workflow/commands	Execute scope change on given RNB reporting object using the predefined set of scope parameters
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/upload	Validate and upload a RNB scope json file using the standard json format for RNB scope
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/validate	Validate a RNB scope json file using the standard json format for RNB scope

5.3.2 Production system URL's

URL	Description
https://apis.collabor8.no/stable/api/Report/validate	Validate Report
https://apis.collabor8.no/stable/api/Report/upload	Upload Report
https://apis.collabor8.no/stable/graph	Run queries for data using GraphQL
https://apis.collabor8.no/stable/api/Files/{fileId}	Get a physical report file with the given id and format
https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/{reportingObjectId}/workflow/commands	Get available RNB workflow commands for a given reporting object specified through the use of the id as part of the url
https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/businessRules	Get all available business rules used as part of the validation sequence for RNB data

https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/download	Download RNB scope Excel report for specified reporting objects, where reporting objects to include are specified as a query parameter named, "reportingObjectsIds" and where different reporting objects ids are separated using comma.
https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/template/download	Download empty RNB scope excel template
https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/{reportingObjectId}/workflow/commands	Execute scope change on given RNB reporting object using the predefined set of scope parameters
https://apis.collabor8.no/stable/api/rnb/scope/reportingObjects/upload	Validate and upload a RNB scope json file using the standard json format for RNB scope
https://apis.collabor8.no/test/api/rnb/scope/reportingObjects/validate	Validate a RNB scope json file using the standard json format for RNB scope