

Test cases

ID	Description of test case	Roles	Start prerequisites	Dependencies CoClass API	Dependencies other parts	Requirements mapping	Input	Output/result	Method of validation	Validation criteria	Comments
10-01	As a user I create a structure on CoClass Studio, containing CoClass Objects, Properties and Activities, with values. As a user I share this structure with some requirements	Developer, planner	The developer and planner needs access to CoClass Studio	None	None	11, 12, 159	Structure to build	Structure is accessible by CoClass Studio	View in CoClass Studio by the user that is shared to	Is the structure accessible?	
10-02	As a planner, I download a structure that is shared to me on CoClass Studio	Planner	Structure available in CoClass Studio	None	None	12, 112	Build structure	Downloaded structure	Structure available in machine readable format (json, xml)	Is the structure possible to download?	
10-03	As a planner, when using a third party tool, I connect to CoClass and create a structure	Planner	Structure available in CoClass Studio	None	None	12, 112, 168, 197	Build structure	Structure accessed in third party application	Structure accessible in third party application	Is the structure accessible in third party application?	
10-04	Create a structure of CoClass for "New Year"	CoClass Customer "New Year" authorized to Govern Structure	A structure of CoClass governed by CoClass customer "New Year" is created	Structure CRUD Authorization	None	12, 112, 168	Information about how "New Year" intend to use CoClass for their asset	A structure with specified name and content can be created and stored at SBT	Verify in CoClass API	A structure with specified name and content can be created and stored at SBT	
10-05	Publish a structure of CoClass	CoClass Customer authorized to Govern Structure	A structure of CoClass governed by CoClass customer "New Year" is published	Structure CRUD Authorization	None	12, 112, 168	Information about how "New Year" intend to use CoClass for their asset and who they want to publish the structure to	A valid structure is available to all CoClass users authorized for a given CRUD level	Verify in CoClass API	The published structure is available with its content for selected CoClass users	
10-06	Update a structure of CoClass for "New Year"	CoClass Customer authorized to Govern Structure	A CoClass structure in the Quadri Desktop "CoClass-cache" (from previous online work sessions)	Structure CRUD Structure versioning Authorization	None	12, 112, 168	Information about versioning policy	New and old version is not mixed up	Verify in CoClass API	A new version of the structure exists in parallel with the old version	Probably not supported in the API under this project's scheduled timeline. Workaround is to create a new structure with a name that status that this is version 2.
10-07	Publish updated new version Structure of CoClass	CoClass Customer authorized to Govern Structure	A structure of CoClass governed by CoClass customer "New Year" is published	Structure CRUD Authorization	None	110, 112, 168, 193	Information about versioning policy	New and old version is available for all CoClass users authorized for a given CRUD level	Verify in CoClass API	The new published structure version is available with its content for selected CoClass users in parallel with the old version	
10-08	Classify an asset according a CoClass Structure in Online mode	CoClass Customer authorized to need a given Structure	A structure of CoClass governed by CoClass customer "New Year" is published	Structure Read Authorization	None	12, 112, 162	Information about how a given asset shall be classified according "New Year's" CoClass Structure	Classified asset according selected Structure	Visual inspection	Classification can be performed without anything left in the UI.	
10-09	Classify an asset according a CoClass Structure in Offline mode	CoClass Customer authorized to need a given Structure	A structure of CoClass governed by CoClass customer "New Year" is published. A CoClass structure in the Quadri Desktop "CoClass-cache" (from previous online work sessions)	Structure Cache	None	12, 112, 162	Information about how a given asset shall be classified according "New Year's" CoClass Structure	Classified asset according selected Structure	Visual inspection	Classification can be performed even without internet connection	
10-10	Clearly an asset using IFC in Quadri Desktop where classes can be selected from lists that follows the color used by the application	CoClass Customer authorized to need a given Structure	A structure of CoClass governed by CoClass customer "New Year" is published	Complete information (description etc.) for given classes	None	132, 139, 143	Information about correct names, description etc. for classes in different languages	Classified asset according selected Structure and color	Visual inspection	Classification can be performed in Norwegian, English and Swedish	
10-11	Visualize "New Year" Structure for CoClass classification as a tree structure in Quadri Desktop and Quadri Web	CoClass Customer authorized to need a given Structure	A structure of CoClass governed by CoClass customer "New Year" is published. A report configuration for the Quadri UI is available	None	None	155, 1, 155, 2, 155, 172, 173	MindMap for given classification	Visual tree that can be compared with content in MindMap	Visual inspection	Classification can be performed in a consistent UI by users who are familiar with MindMaps from SBT	Does the industry have evidence/analyses to agree on standardised perception (names, colors, etc) for visualizations?
10-12	Produce asset assessment reports that follows the structure of selected CoClass Structure	CoClass customer	A structure of CoClass governed by CoClass customer "New Year" is published. A report configuration for the Quadri UI is available	None	None	168	MindMap for given classification	Report that can be compared with content in MindMap	Visual inspection	Users that look at reports should be able to see that the content reflects the structure in MindMaps from SBT	
10-13	The user reads a code. According to requirement text: An extra table for a reliable functional system	Designer	We do not take into account inproceeds for the following test case	None	None	To be mapped	CoClass API	None	None	None	Start of scenario
10-14	Log on to Buggilign CoClass via Saver. Authenticates the user at the user interface	Designer	Service account or individual login? Needs to be defined by Buggilign	Our interface will depend on this. For this we will assume that we use service account as defined in CoClass API	None	To be mapped	login information and Authorization keys from Buggilign	Saver and the user is able to login in Buggilign CoClass via Saver	login confirmation in Saver	Successful login confirmation	
10-15	Query Buggilign CoClass through API. Saver data is stored per project. Saver will access Buggilign CoClass and query through the API when CoClass codes are created	Designer	Buggilign CoClass API	Saver is able to retrieve the parent child structure through the API	None	To be mapped	User input and interaction	User selected Tables and codes are in Buggilign in dynamically registered in Saver	Visual confirmation in Saver GUI	API tables and codes in Buggilign CoClass are enabled to be queried in Saver GUI	
10-16	Check a list of tables that are available at Buggilign CoClass. User can choose what code/table user wants to download	Designer	Buggilign CoClass API	Saver is able to select and download structure and codes through the API	None	To be mapped	User selection	User selected Tables and codes are in Buggilign and downloaded to Saver	Visual confirmation in Saver GUI	Selected codes/tables are confirmed downloaded in Saver GUI	
10-17	The system Retrieves data with version from CoClass API to Saver	System	Buggilign CoClass API	CoClass API will provide version	None	To be mapped	User selection of relevant CoClass version for current program	Saver will have relevant version	Version number in Saver	Version number in Saver will be relevant	
10-18	Tables are project adapted in Saver. Irrelevant non-relevant codes (BIM codes but they are not active in the project)	Designer	CoClass codes downloaded to Saver	no	None	To be mapped	User selection	Codes can be hidden/faded in Saver GUI	Confirmation in GUI	Confirmed in GUI	
10-19	Code is displaying specific error messages. This could be CAD layer or in property sets in civil3d or Attribute property on CAD-block	Designer	CAD file with CAD-block with attribute definition for CoClass. CAD file is scanned by IFC into IFC data	no	None	To be mapped	CAD file with CAD-block with attribute definition for CoClass.	Codes are confirmed as OK in Saver	Confirmation in GUI	Confirmed in GUI	
10-20	Buggilign has published a new version of CoClass	Designer	Different versions with a difference needs to be retrieved from CoClass API	no	None	To be mapped	Deleting codes in table with a different version than selected in the CoClass API	The project's CoClass version can be updated in a controlled way	Change between versions can be tested, confirmed in the GUI. New codes can be selected and imported	Confirmed in GUI	
10-21	The user loads the same tables as in test case P1	Designer	Buggilign CoClass API and versioning	Different versions with a difference needs to be retrieved from CoClass API	None	To be mapped	Deleting codes in table with a different version than selected in the CoClass API	The project's CoClass version can be updated in a controlled way	Change between versions can be tested	Confirmed in GUI	
10-22	Saver answer with what is the difference (visible in the GUI)	System	Buggilign CoClass API and versioning	Different versions with a difference needs to be retrieved from CoClass API	None	To be mapped	Deleting codes in table with a different version than selected in the CoClass API	The project's CoClass version can be updated in a controlled way	Change between versions can be confirmed	Confirmed in GUI	
10-23	Doesn't then accept the new version	Designer	Buggilign CoClass API and versioning	Different versions with a difference needs to be retrieved from CoClass API	None	To be mapped	Deleting codes in table with a different version than selected in the CoClass API	The project's CoClass version can be updated in a controlled way	New version has replaced old version Saver	Confirmed in GUI	
10-24	Downloading of correct CoClass version	See owner	Downloading of correct CoClass version	None	None	161	CoClass naming API	File received	On screen	Presented	
10-25	Establishing roles and shape management	Customer	None	None	None	160, 162, 168	Established	None	On screen	Presented	
10-26	Uploading of IFC. Based on Autodesk drawings from "Customer"	Planner, planner, entrepreneur and customer	Information available in customer database. Import of drawings, based on IFC data	None	None	1, 163	IFC, Revit or AutoCAD files	File received	On screen	Presented	
10-27	Information handling of existing building "As is"	None	None	None	None	164	Established	Established	Presentation in mobile, iPad, PC	Presented	
10-28	Functional control of all classes (old and new) related to the same alarm loop. Adding inspection protocol to the program	Inspector	None	None	None	165	None	All classes concerned shown on drawing and in structure	On screen	Presented	
10-29	Updating of parameter settings in vent system	Installer	None	None	None	172	Parameter setting updated	Parameter setting updated	On screen	Presented	
10-30	Comparison between Version 0 and 1. Differences identified and compared with contract	Entrepreneur/Customer	None	None	None	173	Differences between version 0 and 1 presented	Differences between version 0 and 1 presented	On screen	Presented	
10-31	Differences in cost and installation time between are identified	Entrepreneur/Customer	None	None	None	173	Differences between version 0 and 1 presented	Differences between version 0 and 1 presented	On screen	Presented	
10-32	Project approved and closed	Customer	None	None	None	166, 10, 11, 14, 18, 20, 24, 31, 35, 35, 42	None	None	None	None	
10-33	General requirements in requirements list	None	None	None	None	166, 10, 11, 14, 18, 20, 24, 31, 35, 35, 42	None	None	None	None	
10-34	Upload a Revit file in FME Server and get suggestions of coClass codes for each object in the file	Owner of a Revit file	A Revit file without CoClass codes	Possibility to make a GET method with a CoClass definition and get an answer with possible codes	None	118, 119, 121	Revit file	List of suggested coClass codes	Visual inspection	FME returns a file with coClass codes for 75% of the objects	
10-35	Upload tabular data in FME Server and get suggestions of coClass codes for each object in the file	Owner of a file with tabular data	A tabular file (e.g. excel, CSV) without CoClass codes	Possibility to make a GET method with a CoClass definition and get an answer with possible codes	None	118, 119, 121	File of tabular data	List of suggested coClass codes	Visual inspection	FME returns a file with coClass codes for 75% of the objects	
10-36	When missing information in IFC storage using IFC the software needs a B2 classid to verify classification against. When the API calls for an classid to verify against the API returns a list with classes formatted as an IFC classid	Class verification	Already classified information	Deliver a classification based on CoClass	None	124	Class to verify	IFC classid	B2 validation of class	Validation ok or rejected	
10-37	Classify asset (wall) in a BIM model with the API	The Revit user	Object (classified)	Get back a classification to the model	None	124	Object to classify	Correct Classification mark (backtracking based on CoClass)	Mapping succeeds when Classification mark	Mapping succeeds when Classification mark	
10-38	Classify asset (wall) in a BIM model with the API	CAD user	Object (classified)	Get back a classification to the model	None	124	Object to classify	Correct Classification mark (backtracking based on CoClass)	Mapping succeeds when Classification mark	Mapping succeeds when Classification mark	
10-39	Calculate LCA in an object in Revit (DWG) based on its classification in CoClass	The Revit User	An object is classified with several CoClass codes that an Reference mark can set	API checks classes an sets a "Reference Mark"	SBREsourcehub uses reference mark to map to against a HCB resource. Annotor API uses the Reference Mark resource to map to correct LCA data and then calculate the object to get the correct GWP value	164	CoClass classification done in object	Correct Classification mark (backtracking based on CoClass)	Mapping succeeds when Classification mark	Correct validation	Object is correct classified in coClass with classes from the needed lists