

Bimsync User manual

By



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1. Log in

Open a web browser and go to www.bimsync.com . If you are not signed in, enter your username and password and click “Sign in”.

If you have lost or do not have a username and password and can use the "I forgot my password" link. After this step you change the language of the user interface from the user settings.

If you do not have a Bimsync account yet, you can click the “Sign up” button to get access to a trial project (14 days).

The top screenshot shows the Bimsync sign-up page at <https://bimsync.com/signup/trial>. It features a 'Sign up' form with the following fields: Full name (required), Email address (required), Phone number, Company, Password (minimum 9 characters, required), and Confirm your password (required). There is also a checkbox for 'Can we contact you to give you a price offer for bimsync Arena and other services?' (required) with 'Yes' and 'No' radio buttons. A green button labeled 'Sign up for 14-day trial' is at the bottom right.

The bottom screenshot shows the Bimsync sign-in page at <https://bimsync.com/signin>. It features a 'Sign in' form with the following fields: Email and Password. Below the fields are three buttons: 'Sign in', 'I forgot my password', and 'Sign up'.


Figures above: Sign up for trial and Sign in.

2 Project

The projects screen is the first screen you encounter after logging in to Bimsync. It gives you a complete list of all projects you have access to.

2.1 Project

If it is your first time inside Bimsync you need to be invited to a project to have access.

You can mark the project as a favorite by clicking on the star  next to each project. All projects marked as favorites will appear with thumbnails.

Open a project

Click on the project thumbnail or chosen project in the list.

(Note: If you have a long list of project they all will appear her.)

2.2 Notification

The notification button will show all new information regarding the projects you are apart of. You can always see this button in the top right of the screen.

2.3 New project

If your current plan and access allows for it, you can create a new project by clicking this button. Otherwise, to create a new project contact Bimsync to upgrade you plan and we will guide you through creating it.

2.4 Map

The Map tab will show the location of all project you are apart of on a zoomable world map. This is based on the geolocation for each project, see [chapter 17.4](#) on Geolocation.

2.5 Info

The info button works as a help button. By clicking on the info button you will find:

- About
- Contact
- Blog
- Developer API

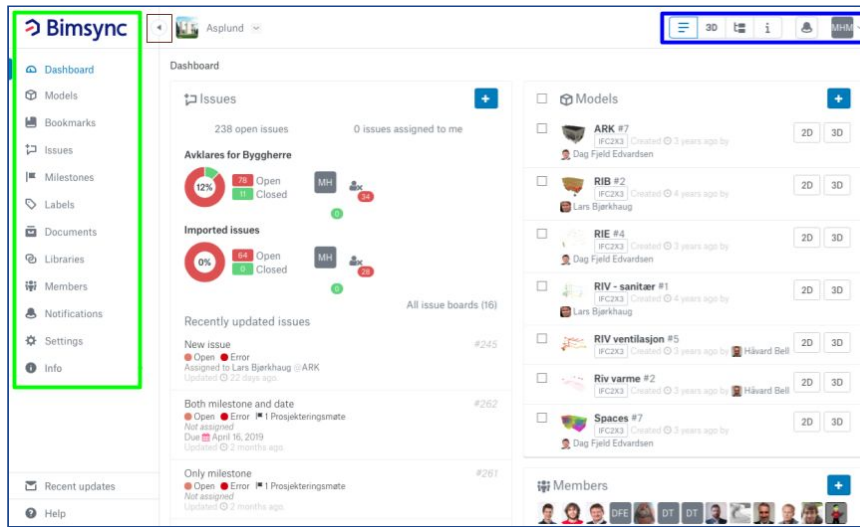
For further details see [chapter 19 Info](#)

3. Navigation in Bimsync

When you have opened a project, the “main menu” in green box below, and the “Navigation menu” in the blue box, are generally how you navigate in Bimsync.

To go back one step in any task, use the internet browser back button.

To go back to project start page, click on the Bimsync Logo.



3.1 Main menu

The main menu is how you switch between the different “tasks”. By clicking a task, the window for that task will appear.

3.2 Navigation menu



Using the buttons in the “navigation menu” you can toggle a function on or off. If the button is Blue it is on/ visible. If the button is grey it is off/ hidden.

1. Task menu or The main information window for each task
2. 2D/3D model viewer
3. IFC tree/ Model building blocks
4. Inspection view
5. Notification
6. Account settings/avatar

Note: You can drag the windows to alter their size as you see fit.

Notice that Bimsync is a “responsive” web application. That implies that what you see on your screen also depends on how large your screen is (logical resolution, which also depends on DPI settings in addition to physical screen resolution). If you open the viewer on a Desktop (wider screen than on a mobile phone) you will typically see that the 3D viewer opens in addition to, and to the right of, the existing view. While on a mobile web browser (like Safari on OsX or Chrome on Android) the screen is much narrower, so the 3D viewer will then typically open and take the full width of the screen. A tablet will typically display Bimsync something between desktop and mobile screen layouts.

4. Project Dashboard

The project dashboard works as a homepage for every project. The dashboard presents an overview of the latest [Issues](#), [Models](#), [Members](#), [Latest Notification](#) and [Bookmarks](#). You can go directly to the subpage by clicking on any information in this window.

4.1 Issue window

The issue window will give you quick updated overview of progress in the project, regarding the new/updated issues and open/closed issues. Recently updated issues will be shown in a list. By clicking on any information in the issue window, you will be directed to a subpage with the full information.

4.2 Models

The models window contains the models for each discipline. There the latest revision of the model is the default choice, by clicking on one model you will be directed to the subpage for revision selector. You can open the model viewer from here, by clicking the 3D button for a model. To import a new revision see [chapter 5.8](#).

4.3 Members

The members window shows the initials/ avatar for all the members in the project. By clicking on a member you will be directed to the account of that member.

4.4 Latest notification

Here the latest notifications relevant for you will appear. You may click on the notification and be directed to the subpage for the case.




5. Models

The models task is one of the most complex tasks in bimsync and there are a range of possibilities. You access the models window by clicking on "models" from the main menu on the left or from the dashboard. The [navigation menu](#) will greatly change how the model window will look.

5.1 Task Menu in model viewer

The task menu is a list of the models for each domain like Architect, Structure, HVAC etc. To choose between the different revision for each model. You click the model of the occupation, this will direct you to the revisions window. To import a new revision model go to [chapter 5.8](#)

You can open models from task menu two different ways:

1. Click on the  button that is on the right for each model to open the model in viewer.
2. If you want to open more than one model. Press the check box  button next to the models you want to open. When you have chosen the models, press the  button next to "model selected" to open the models in viewer.


There are three important buttons that will be explained in more detail at a later stage.

These are , , Delete model


5.2 3D viewer


When you have open the 3D viewer there are a range of buttons and possibilities. Under her is a list of the buttons with a function in 3D viewer. The buttons function will be explained in more detail at a later stage.


 This button is a [revision selector](#) menu for the "task menu".


 This button will make the selected item [translucent](#).


 This button will [hide](#) the selected item.

 This button is the show all translucent or hidden object.

 This button is a dropdown menu for changing the camera view etc.

 This button is a measure tool. By clicking the button you have a choice between Object picker, Laser measure, Tape measure and Clear all measures.


 This button is to activate the "walk mode".


 This button is the navigation settings button.

 This button open the 2D viewer window.

Right click the mouse in the 3D viewer to get the context menu.

5.2.1 Revision selector

To open the revision selector, click the button with the “cube”  on the upper left of the screen. The revision selector works very similar to task menu in model view, from here you can turn on or off a domain model in the viewer or choose which revision you want to look at. Click the [2D] or [3D] buttons to turn on/off a model in 2D and 3D, or use the revision button to get a drop down where you can select the revision you want to work with.

When the 3D button is blue  the model is visible in the model viewer. And when the button is grey it is off.

5.2.2 Translucent button

This button will make an object translucent. By clicking on an object(s) and after clicking the translucent button the object will become translucent. But if you click the “arrow”/ dropdown button you can make all others object translucent except the object you have picked.

5.2.3 Hide button

This button will hide an object. By clicking on an object(s) and after clicking the hide button the object will become hidden. But if you click the “arrow”/ dropdown button you can hide all others except the object you have picked.

5.2.4 Show button

This button will show an object that has been partially invisible or translucent.

5.2.5 Navigation settings button

This is a navigation settings drop down button menu.

Here you can edit:

- show spaces
- walk mode
- show joystick
- translucent opacity
- navigation settings:
 - walk speed
 - elevation speed
 - rotation speed
 - view angle

5.2.6 Camera view

This button has predefined camera viewing points. The first 6 choices activate predefined viewing points, the alternatives are: Start, Back, Left, Front, Right, Top. Notice that the keyboard shortcuts for each of these are shown.


5.2.7 Measuring tool

By clicking this button you have a choice between Object picker, Laser measure, Tape measure and Clear all measures.

5.2.8 Walk mode

By clicking this button a joystick will appear and you can walk/ move around. You can also use the basic controls explained in chapter 5.3

5.2.9 2D plan viewer

This will open a window where you see the model in a 2D view. The red arrow will show where you are in the building. By clicking the  lock option the floor plan will follow the red arrow.

5.2.10 Right click

By right clicking you will open the context menu. The context menu will be explained in 5.6

5.3 Summary of most important shortcuts and basic controls

Mouse 3D:

Select component	Left Click
Select Multiple components	Ctrl + Left click
Move forward/Zoom	Mouse wheel
Orbit	Left click and drag
Pan model	Right click and drag
Look at component	Double click


Mouse 2D:

Move horizontal	Left or Right click on red arrow and drag
Pan 2D view	Right click and drag 2D map
Zoom 2D view	Mouse wheel


Keyboard:


Move forwards	w
Move backwards	s
Move left	a
Move right	d
Move up	x
Move down	c
Turn/rotate left	q
Turn/rotate right	e
Look up	r
Look down	f
Look at	l
Hide selected	h
Make translucent	t
Show selected	g
Show all	shift + g
Reset view	0 (zero)


5.4 The tree structures in the IFC models


The “IFC tree” button  has to be activated to see the tree structures for the IFC models. This structure is imported from the IFC file. The tree structures shows us where a selected object belongs in the model.


There are 5 different tree structures:

- Containment 

The containment tree provides a hierarchical perspective on how the different IFC objects relate to each other.
- Component 

The component tree provides a hierarchical perspective on the components that make up an object.
- Type 

The type tree shows all the objects sorted by their type.
- Layer 

The layer tree provides a hierarchical view of the layers in the model.
- System 

The system tree provides a view of the systems in the model.

Note that the object selected in the tree and in the model are in sync. If you click on a window in the 3D mode, it is selected in the tree. And vice versa. You can also double-click on a “leaf” in the model and make the 3D camera move to that object.

5.5 Inspect panel

The 3D viewer button is useful to have open when you open the inspect panel.

To open the inspect panel click the inspect panel button .

The inspect panel shows all the data for the selected object in the BIM. The top part has a dropdown that lets you navigate quickly to the desired part of the information.

In addition to the information from the IFC models(s) it also shows issues related to the selected object. Clicking on a related issue brings you directly to the issue-view (chapter 7) with this issue selected.

The “library box” in the viewer exists if there are documents or library items connected with the selected object(s). You can click on the number to the right of these items to get the linked documents/library items shown in a view on the left part of the screen.

Selecting two or more objects shows common properties, issues or tags.

5.6 The context menu in the viewer

When you right click in the 3D-viewer (or on a touch-interface; Long click) you get the context menu. The functions and short key in this menu can be described as below:

5.6.1 Show all (shift-g)

Shows all building elements in all the open models. In practice this is used to “unhide” or undo “Make translucent”. Notice that objects that are hidden behind a clipping plane will still not be shown - to show these you need to hide or delete the clipping plane(s)

5.6.2 Hide (h)

Hide the selected object(s)

5.6.3 Hide others (shift-h)

Hide the object(s) *not* selected

5.6.4 Make translucent (t)

Makes the selected object(s) translucent (semi-transparent)

5.6.5 Isolate (shift-t)

Makes all other visible objects translucent

5.6.6 Look at (l)

Point the camera at the selected object(s), and move it close enough to show the whole of the object(s).

5.6.7 Select intersecting (y)

Selects objects that are intersecting (colliding with) the currently selected object(s).

5.6.8 Select parent (p)

Select the object above the currently selected object in the active IFC tree. This can be used to select objects of the same type, very useful for tagging

5.6.9 Previous selection (z)

Select the object that was selected before the current one

Note the last three are explained in chapter 5.7.

5.7 Clipping / Sectioning

Bimsync has powerful support for clipping in model viewer. The purpose is to create one or more planes and then only show what is on one side. That way we can look at the parts of the building you are interested in without having the view obscured. A clipping plane to either horizontally and vertically and thus create a sort of interactive top view or side view of the model. If you wish, you can also cut at a freely chosen angle. You can create up to 6 simultaneous cutting planes.

5.7.1 Add clipping plane

You can create a cutting plane by first selecting a surface, for instance a wall. Then right-click and select "Add clipping plane". The model will then be clipped by a cutting plane that we can only see the outline of and parallel to the surface we have chosen when we added the clipping plane.

5.7.2 Moving the clipping plane

To move a clipping plane, left click inside the clipping plane and drag the mouse in the direction you want the clipping plane to move.

5.7.3 Choosing a clipping plane

In the bottom left of the model viewer you can choose between the clipping planes. By left clicking on the plane you want. The plane will be outlined with green.

5.7.4 Remove clipping planes

To remove the clipping planes, right-click and select "Remove clipping planes". This will remove all clipping planes.

5.7.5 Sectioning top and bottom

Sectioning is using clipping planes by for instance choosing a wall that is attached to a storey and then right click and select "Section top and bottom".

This creation makes a cut plan on top of the selected object (the wall) and one beneath, which is often useful to see one storey isolated. The planes created in this way are moved and removed in the same way as conventional clipping plane.


5.8 Import

The model page shows us the domain models present in the project. By clicking on a domain model one will be directed to the revisions page. One can then click on "Import" and upload a new revision model.

This is done by choosing an IFC file from your hard drive. When uploading you will be asked to enter a comment that describes this upload (brief explanation to the project participants about what is new in the revision being uploaded). Click "send" to start the upload process.

When the process is complete Bimsync analyzes the IFC file and generates the geometry in the background. For large models it can take some time before the file is ready to be worked on in the viewer. If you wish you can exit Bimsync, geometry generation happens uninterrupted anyway. When importing is complete a notification will pop up in the menu bar in Bimsync and additionally an email will be sent to you stating that a new version is uploaded to a model for which you have access.

5.9 Export

You will find the export button when you are in model viewer with task menu  open. The button is located in the top right of the screen. By clicking the export button it will open the export screen.

The export screen gives you the option to download your model to your local hard drive. You can either download a single model, a merged IFC file consisting of the models you have selected, or a zip-file consisting of separate (not merged) models. You can also choose to bake into the exported IFC file(s) tags and properties (library contents, bsDD or user defined) that you have added using the viewer.

5.9.1 New Export

By clicking the new export button in the top right of the screen you will open a new window. From here you follow the steps to make a new export:


1. Format options
2. Select model(s) and Revision(s)
3. Merge options
4. Add the name and comment of the project
5. Sharing options
6. Press the export button

6 Bookmarks


You will find the bookmarks  in the main menu.
All the bookmarks that have been taken you will find here.

6.1 How to create a bookmark.

Open the 3D viewer from the navigation menu. Move around in the model until you have the screen view you want to make a bookmark off and press the new bookmark button.

If you want you can make a description of the bookmark that is optional and then press the create button . And the bookmark is created.

7 Issues

The issue button  you will find in the main menu on the left. After clicking issue button you will be directed to the issues window. The issues window provides an overview of all issues connected to the project. In the issue window there are buttons relating to the issue window. These buttons will we go deeper into in following sub chapters.

7.1 Issues (Board)/ Issue root folder

You will find the issue board in the top left of the Window. The issue board is the root folder for issues. From here you create sub folders for different issue lists. The issue board list you had open last is the list you will come into after switching between windows inside Bimsync. Se chapter xx how to make a new issue board list.

(Note that only member with administrator access can make new issue board list.)

7.2 Filter issues

In the left of the screen there is filter menu and then to the right there is the issues list. The issue list will differ upon what filters you choose to look at.

7.3 Issues

If you select an issue a new window will appear for that issue.

From here you can comment, assigned to a specific user or change the type of the issue. The available types are Error, Warning, Info and Unknown, in addition to the user defined types. If the issue has a snapshot in the 3D model viewer there are some icons in the snapshot.

Recreate snapshot

By clicking this button the snapshot will be recreated with the same model and revisions open. And the camera in 3D model viewer will move to that snapshot.

From the dropdown menu

Hamburger menu

To access this you need to be inside an issue then the hamburger menu will have these options.

Settings

This will take you to setting for issues board that this issue is apart of.

Move issue

This will move the issue to a different issue board list.


Delete issue

This will delete the issue, but only a member with administrator access can delete.

7.4 Creating a new issue

Creating a new issue can be done from the issues-screen, or from the dashboard issue viewer. To create a new issue click the “New issue” button on the top right of the screen. This will open the New issue window.

1. Enter the title/subject and use the textbox for comments to provide further details.
2. Fill out the drop down menus:
 - a. **Issue board:** There will be different issue board list to choose from and they will differ from project to project.
 - b. **Status:** You can choose between open or closed. Normally you chose open when you are creating a new issue.
 - c. **Type:** Here you choose the type of issue you are creating. The types you can choose between are Error, Warning, Info and Unknown.
 - d. **Requested by:** Here you normally set your own name, but you can choose any name here.
 - e. **Assigned to:** Here you can assign the issue to a specific person. If you know who will be responsible for it.
 - f. **Due date:** If you know set a due date or live it blanc.
 - g. **Milestone:** Pin it to a milestone or live it blanc.
3. Add the relevant labels for the issue.

4. By clicking on the add button  You can add a 2D/3D snapshot or picture from your hard drive.
The 2D/3D snapshot comes from the latest camera angle in the 3D/2D viewer. By opening the 3D button in navigation viewer. You can navigate your way through the model to the issue in question and pressing the add button choosing the 2D/3D snapshot and then the snapshot will appear.
5. If you left click on the snapshot you have taken, you have the option to add annotations to the image. Under the image a toolbar will appear with the tools to draw the specific point of the issue in more detail.
6. The text box besides the add button is to write a comment, mention people by typing @name or link to other issues by typing #link.
7. When you are chosen all the relevant info for the issue press submit in the bottom right.

Note: If you are on a mobile unit you can either use a stored picture or take a new one with the built-in camera. *All screens are dynamic ("responsive") and adapt to the screen size of the unit you are using.*

7.5 Exchange issues

With BCF import / export

Bimsync is 100% committed to open standards, and we have based on that implemented export and import for BCF (BIM collaboration format).

This means that the user can import and export issues from/to other software that supports this format (for instance Solibri, Navisworks and many others).

Click the button captioned "Exchange issues". From here you can click the buttons under the heading "File based exchange" to import or export to BCF-files. When you export you can choose to export the whole issue-board, or only the filtered issues.

If you use Bimsync as a BCF-server you can connect directly to other software and send / receive issues from there to/from Bimsync -- without using files. This uses the standardized (from buildingSMART International) BCF API. Examples of software supporting this includes DDS CAD, Revit through NTI Tools and Solibri. The menu included the url you have to paste into Solibri to connect Solibri to this project / issue board.

You can for instance import a file with collision control data for the same model created in another software application. This way you can continue your workflow inside Bimsync.

7.6 Settings for issues Settings Administrator

Only a member with administrator access can edit these. From the issue screen you can click on settings in the top right of the screen. Here you have access to different information.

7.6.1 Access control

Access control is for administrator members and has its own chapter 18.

7.6.2 Status

Here you can add statuses or edit existing ones.

7.6.3 Types

Here you can add types or edit existing ones.

7.6.4 Archive issue board

You can not delete an issue board in Bimsync, but you can “archive” it so that it does not show anymore. You need to be an administrator in the project to do this.

You first select “settings” for the issue board, and from there you select the “hamburger” menu (three vertical dots) to get the “Archive issue board” option.

Notice: You can not get an archived issue board “unarchived”, but you can see the issues in it by clicking on “issue board list”, and at the bottom of that list you can select “View archived”.

7.7 Hamburger menu

This dropdown menu you will see from the main issue window on the right side.

Issue board list

From here you have a complete overview of all the issues boards.

New issue board Administrator

Here you will open the window to make a new issue board.

Fill in the name, description and type and press add.

Statistics

Here you will open the statistics for that issue board.

- **Overview**
You will have an overview of all the open and closed issues on the board.
- **Distribution**
Here you have the accumulated status on open and closed issues.
The type distribution on the different issues.
- **Plan reliability**
Plan reliability measures your ability to close issues before it's due date.

Move history

This will show the issues that have been moved and where they have been moved to.

Import history

This will show the issues that have been imported and where they have been uploaded to.

Export history

This will show the export history inside issues.

8. Milestones

The milestone button you will find in the main menu.

In the milestone window you will see all milestones that are created. The issues that are pinned to the milestone will be shown as open/closed.

8.1 New milestone


And in the top right you have a button for creating a “new milestone”.

You can use the milestones in many different ways:

- For setting a due date every quarter
 - Setting a due date by the end of the month
 - Before construction start
- etc.

The milestones work as a tool to set more than one due date. So when you set a due date for an issue, you can choose a milestone the issue will be apart of.

9. Labels

The labels button  you will find in the main menu. When you click it the labels window will open. Here you have all the labels in a list with the what attachment that each label is pinned to.

9.1 New label

The new label button you will find in the top right. by clicking on it a bar in the top of the window will appear.

1. Choose the color of the new label
2. Choose a name
3. Add it to a group (optional)
4. Click the add button

10. Documents

The documents button you will find in the main menu.


This tab is for uploading all documentation in a project. How you build up your folder and document structure is up to each project. All members can add folders and documents to the structure.

The search/ filter function is a very useful tool to find a document(s) se [chapter 10.1](#) to learn how it works.

(Note: Admin members is in control of access control for folders and documents)

10.1 Search and filter option

The search and filter option you will in the top part of the window. You search by writing the name of the document or you can write the name of a label that you know is pinned to the document.

By clicking the filter button  Filter a sidebar will appear and by checking the boxes of you narrow the search.

10.2 New file

The new file button is to add a new file. By clicking the new file button the file window on your computer. From here you choose the file you want to add.

10.2 Hamburger menu

If you click on the hamburger menu you will have the choice of New folder, Library setting, and new document library

10.2.1 New folder

This button will make you a new folder. The window or folder you are in when you click the new folder button is the place that the new folder will appear.

10.2.2 Library setting

By choosing the library settings button you will be directed to the setting.


See chapter 18.3 for access control on the root folder.

10.2.3 New document library

Here you can choose between two different types of document library.

- dropbox
- cobuilder pro documents

10.3 Root Folder

The root folder(s) you will find in the top left of the window. To switch between folders click the dropdown button . The name of the root folders may differ from project to project.

10.4 Choosing a folder

There are two ways to look at folder and the content of the folder.

1. Clicking the folder and it will take you to what is inside. From here you can still do point two for the folders or documents that are in the folder you opened.
2. Clicking the check box to the left of the folder(s).

10.4.1 Check box option

By clicking the checkbox(s) a side window will open. Here you will see how many document(s) that are selected. Under that you have a range of buttons.

10.4.2 Download

By clicking the download button you can choose between Zip file or folder download.

10.4.3 Move

By clicking the move button a window will open of the folder structure. From here you can move the folder or document to the new place.

10.4.4 Link


To link a document to an object. Open the 3D viewer and pick the object(s) you want to pin the document(s) and then click on the link button.

(Note that you can not link a folder.)

10.4.4.1 Handover to FM

To enrich a building model with links to documents and/or library items (such as documents or product libraries), you open the model(s) you want to enrich the 3D-viewer and the documents folder/library you want to link to the building components at the same time. This is a many-to-many relations, you can select many objects in the 3D viewer and using checkboxes many documents / library items. When at least one document/library item and at least one building component is selected, a new button appears that you can click to establish this link.

10.4.4 Unlink

To unlink an object click the unlink button. If you want to unlink a particular object go to linked objects and click the .

10.4.5 New revision

To upload a new revision of a document click the new revision button. This will open the file window and here you can choose the new revision file.

10.4.6 Delete

Here you can delete folder(s) or document. When you press the delete button you will get a window that asks you if you are sure.

10.4.7 Labels

By clicking the label button you can pin the folder or document to label(s). A text line will appear. Here you can write the name of the labels or left click to get a dropdown list of all labels.

11. Libraries

You will find the libraries button  in the main menu on the left.

The user interface for the library function will be a little bit different depending on which type of library you are using.

11.1 Intro

The libraries function allow users to include external information sources (or references to them) in a Bimsync project.

The most frequent use case is to link an item from a library to an object in the BIM model, for instance in order to provide a client in a construction project a Facilities Management (FM) handover where items in a product library are linked with the parts of the BIM where they are used.

The advantage is that the FM users can select an object in the model and directly get access to product information. In addition one can in the part of the construction project where FM documents are collected check that all relevant objects have FM information.

The libraries function works like documents but for linking objects to status code, product data, a link to a internett site or something similar

2

The libraries function in the 3D model viewer, can be used in several ways. Objects can be assigned a status code, product data, a link or something similar.

The libraries are object libraries that are imported by the user using the libraries screen. In addition you can assign properties from the buildingSMART Data Dictionary. If the library has attributes they will be assigned to the correct IFC property set.

To assign from a library to one or more objects you first select the object(s) from the 3D-model or the IFC tree. In the screenshot below a window is selected. After selecting a library you now have 3 options: select all content, select all content that is assigned, or select all content that is unassigned. The last two options filter the content of the library so that you get a better picture of what content has been assigned in the model.

In the example below a library containing several statuses has been used to mark tag an object with how far in the production process the window currently is.

To assign a library item from a user definable library to all the selected objects, click the checkbox to the left of the content item. The content that has been assigned to an object is shown on the inspect tab (chapter 7.7).

All library content and attributes added in Bimsync can be merged into the IFC-files if you choose to export the project (chapter 5).



11.2 User Defined Libraries

User defined libraries are a simple and practical way of getting existing data into the BIM. They can be used to tag objects with information.

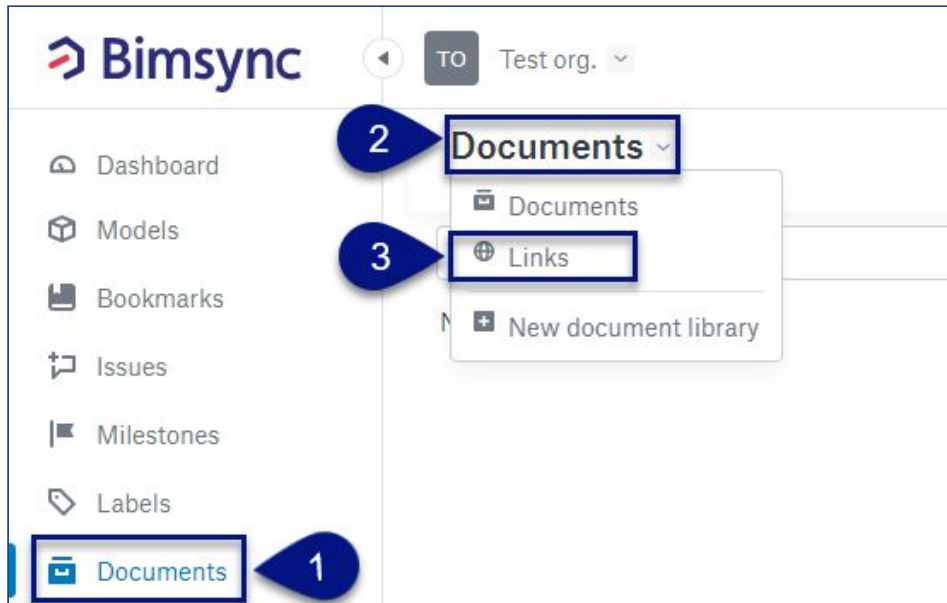
One example can be **<example with status of objects, ref table below>**

User defined libraries can be uploaded as simple spreadsheets (csv). As long as the “code” is maintained, the linking between one or more library item(s) and the object(s) is maintained. If the string in the “sort” column is hierarchical, an item - subitem relation is created (so 1.1 will be a sub-item of 1).

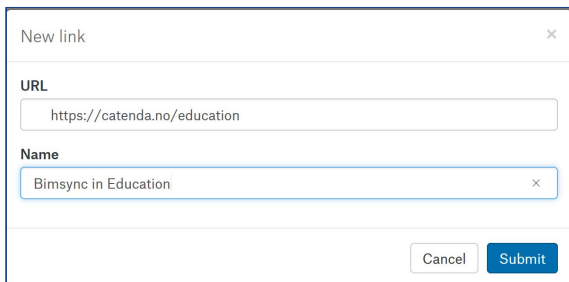
Sort (unique)	Code (unique)	Name (mandatory)	Description (optional)
1	S0	Not considered	desc
1.1	S01	Not considered sub 1	
1.1.1	S02	Not considered sub 1 sub	
1.2	S03	Not considered sub 2	
2	S5	Under programming	desc
3	S1	Under construction	desc
4	S3	Approved	desc
5	S4	Changes needed	desc

11.3 Link Libraries

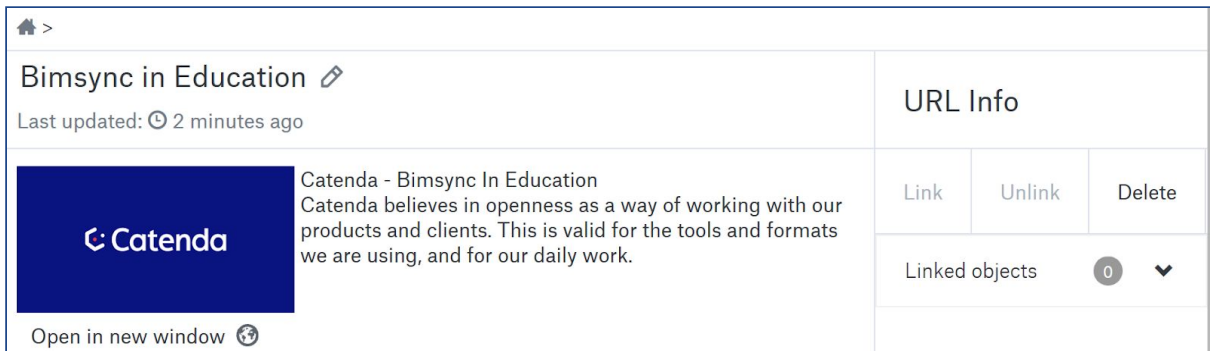
To access “Link libraries” go to Documents, and from there select “Links” from the dropdown menu (see image below).



From the “Links” page you can create a new link by clicking on the “New link” button. From there you add the link url and name:




After you have done this, a short preview of the link is shown for this link (autogenerated from the link endpoint):



URL Info	
Link	Unlink
Link	Delete
Linked objects	0

When you have added the links you want, you can tag with them in a similar way to documents and library items. If you are a project administrator, you can also choose to “Enable completion” through the settings button. This can be used to show/hide objects that you think of as being fully tagged.

12. Members

The member button  is in the main menu on the left.

The member page contains a list of all participants who are associated with the project. And on the right of the screen there is a list of all the different teams that has been created.


The project owner can invite new participants by entering their email address. You have the option to remove your own connection to the project.

NB: If you leave a project, the project owner has to invite you for you to rejoin.


12.1 New team

The new team button  is in the top right of the screen.

12.2 Invite member


When you are on the members page you have the invite member button  in the top right of the screen. Click on the invite member button and it will take you to the invites screen.

12.2.1 Invite one member

1. Fill in the email address and press enter or click on the email with the left mouse button.
2. Choose the role/access for the new member
3. Choose the teams the member should be apart of.
4. Press the Add button 
5. Click the send invites

12.2.2 Invite a group of members

If the group will have the same role and be the part of the same team, you can then fill in more than one email address.

1. Fill in the email address and press enter, do the same for each new email address
2. Choose the role/access for the new members
3. Choose the teams the members should be apart of.
4. Press the Add button 
5. If there is a member(s) with a different role or team, there is a new line to add that member(s) after pressing the add button.
6. Click the send invites

13. Notifications

The notifications button you will find in the main menu or in the top right of the screen.

The notification system is useful for keeping track of what happens in the buildings and sites you want to keep track of. It tells you if there has been something new - for example, if a new revision of a building is uploaded or if someone has assigned an issue to you.

There is also a separate screen that has a filter list for the notifications.

13.1 Settings in notifications

By clicking the settings button in the top right. The setting window will appear.

From here you can filter what notification alerts you want in Bimsync, Email or Slack.

These chosen settings are personal from user to user.

14. Mobile units

The user interface in Bimsync will automatically adapt to the screen size of the device you are using (responsive design). In addition to PCs Bimsync is also available on tablets and mobile phones. On mobile units you can work with issues and upload photos. Only relatively modern units with WebGL (Android, iOS, Windows Phone) supports the 3D viewer, but on older devices the other pages work without problems.



15. API

Bimsync has powerful APIs that allow external applications to use its functionality or exchange data. We have several APIs:

- Data/main API
- 3D viewer API
- 2D viewer API
- BCF API
- Viewer widget API

Several companies relies on Bimsync to provide BIM functionality for their applications. Catenda, the creators of Bimsync, use the viewer and data APIs ourselves in several projects since it allows us to quickly create applications with BIM functionality. One example is the “bygglett” demo app where we showcase how building application permits can be made much more understandable by visualizing regulations and government rules: <http://bygglett.catenda.com/>

Contact us to learn more about what we can offer and how you can become an API client. See here for more detailed information about our APIs:

<https://catenda.no/products/api>

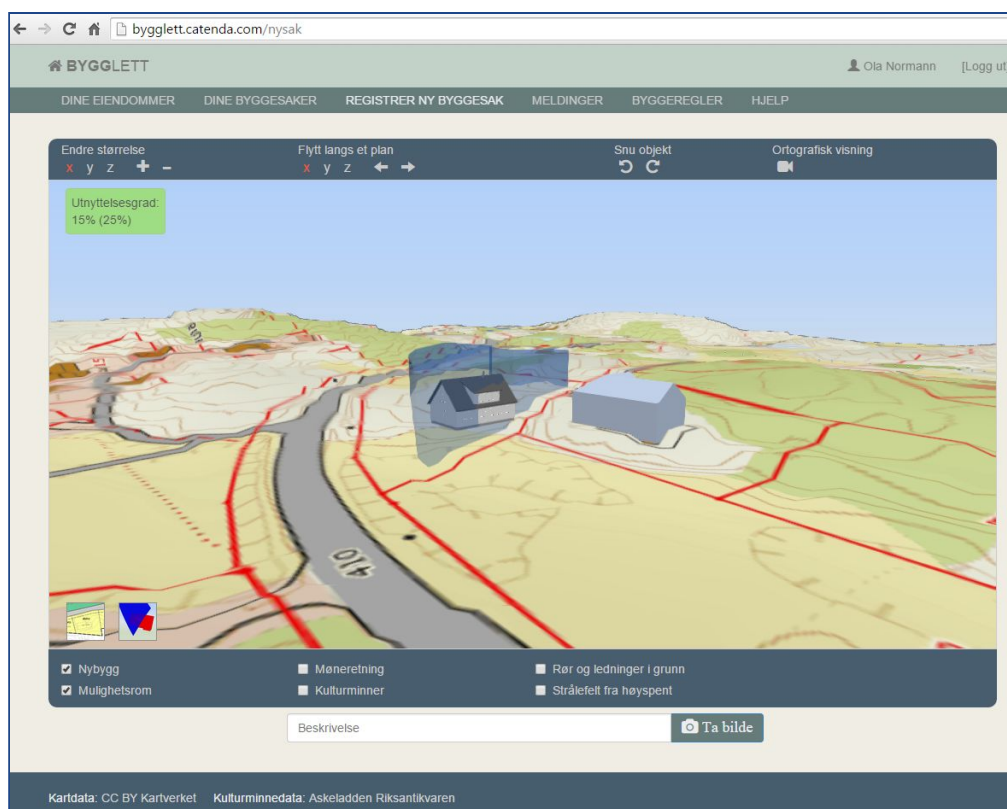


Figure above: The bygglett demo showing Bimsync 3D viewer, government data and streamed 3D

map data combined.

16. Profile/ Account

By clicking on your name/avatar in the top right in any window, you can chose account from the drop down menu. Here you have 4 different taps: Profile, Preferences, Integrations and Notifications.

16.1 Profile

From the profile tab you have your contact information, Avatar and change password.

16.1.1 Contact Information

Your contact information consist of your email.

16.1.2 Avatar

By default your avatar consists of your initials, but you can upload a picture of yourself.

16.1.3 Change password

Here you change your password. By writing your old password and typing the new password twice, you have changed you password.

16.2 Preferences

Here you can change the language.

At the moment Bimsync is available in 15 languages: English, French, Danish, German, Spanish, Indonesian, Norwegian bokmål, Norwegian Nynorsk, Dutsch, Polish, Thai, Portuguese (Brazilian), Vietnamese, Japanese and Chinese.

16.3 Integration

Here you can link your application to Bimsync using our API and see what applications

17. Settings

You will find setting in the main menu on the left.

Here you have Project owner, Project Details, Access Control and Geolocation.

17.1 Project owner

Project owner is the person that created the project. Here you will find this person's email.

17.2 Project Details

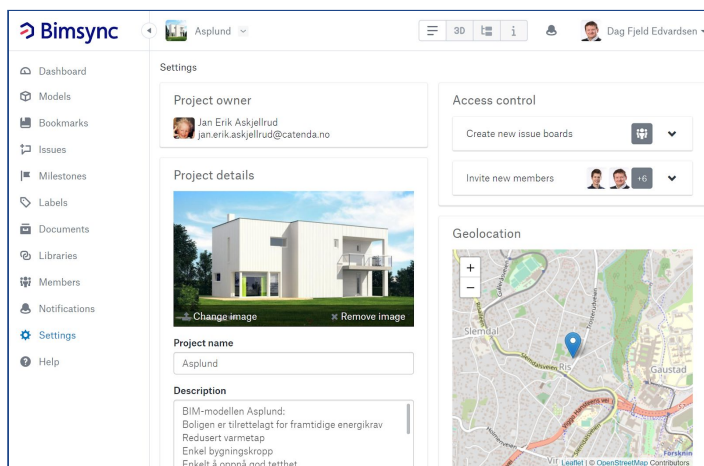
The project details consist of the project name and description. Her you can add a picture of the building for the projects marked as favorites.

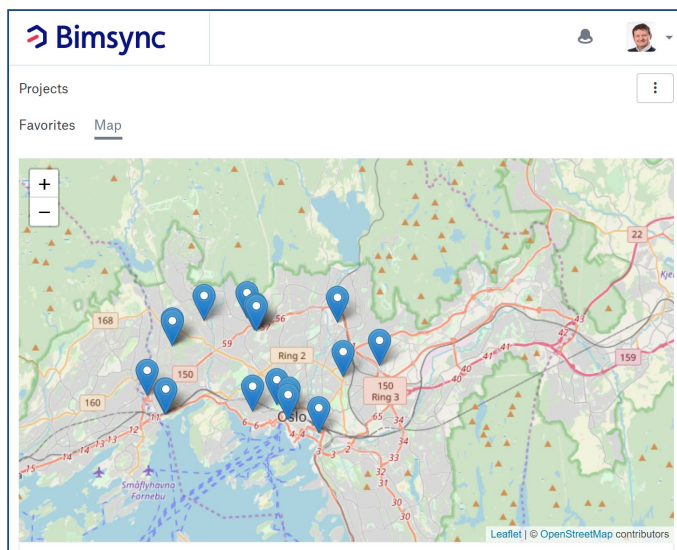
17.3 Access Control

All access control in Bimsync will be explained in chapter 18.

17.4 Geolocation

To set up the geolocation function go to settings in the main menu. From there the geolocation feature allows you to place the building in the world. If you have geolocated your project, you can see its marker on the map in the map version of the project list when you open Bimsync.





18 Access control Administrator

Here we will go through access control for folders/ documents, New issue board, root folder and members. Note that only project owners and administrators has access to these settings.

18.1 New issue board Administrator

To do access control on how can create new issue board.

1. Go to settings in the main menu on the left.
2. Under access control on this page you have "Create new issue board". Click on it.
3. A list of who can create and Edit access will appear. Click the Edit access button.
4. Define access for member(s) or team(s).
5. Under the member(s) or Team(s) you have selected will appear. Under access you choose between Can create and Not allowed.
6. Press the save button.

18.2 Root folder on issues Administrator

To edit access control on root folder for issues:

1. Go to issues in the main menu on the left.
2. In the top right of the new window you will find settings. Click the settings button.
3. From the new settings window you will find access control. Click access control button.
4. A list of the members with access will appear and the edit access button. Click the edit access button.
5. Define access for member(s) or team(s).
6. Administrators
7. Others: This is the access for all others then yourself, with an exception from admin user. The drop down menu has some options.
 - No access
 - Read

- Write and Read
 - Full access (all admin users)
8. Owner: This is the access for the owner of the folder(s) or document(s). It has the same options as in point 7.
 9. You need to choose between the last three:
 - Folder and new content
Only sets permission on the folder, no sub elements. New elements will always inherit the access from the folder they are added to.
 - Folder and files
Only sets permissions on the folder, and the files that are directly in that folder. Sub-folders, or files in sub-folders will not be affected.
 - Folder and all subfolder and files
Sets the permissions on the folder, and all sub content of that folder, both folders and files
 10. Click save and the access control is done.


18.3 Root folder for Documents Administrator

Edit access control on root folders for documents:

1. Go to documents in the main menu.
2. Click the “hamburger menu” in the top right, here you will find Library setting. Click on the library settings.
3. In the new window you will find access control on the root folder. Click on it.
4. Here you will see the members that access to the root folder and the edit access button. Click the edit access button.
5. The edit access window will appear
6. Define access for member(s) or team(s).
7. Administrators
8. Others: This is the access for all others then yourself, with an exception from admin user. The drop down menu has some options.
 - No access
 - Read
 - Write and Read
 - Full access (all admin users)
9. Owner: This is the access for the owner of the folder(s) or document(s). It has the same options as in point 7.
10. You need to choose between the last three:
 - Folder and new content
Only sets permission on the folder, no sub elements. New elements will always inherit the access from the folder they are added to.
 - Folder and files
Only sets permissions on the folder, and the files that are directly in that folder. Sub-folders, or files in sub-folders will not be affected.
 - Folder and all subfolder and files
Sets the permissions on the folder, and all sub content of that folder, both folders and files
11. Click save and the access control is done.

18.4 Folders and Documents Administrator

This access control is for folders and documents that are inside the root folder. Only an admin user can edit the access.

1. Go to the documents in the main menu
1. Click the check box(s) beside the folder(s) or document(s) you want to edit access.
2. A window on the right will appear and at the bottom of that you will have the access control. Click on it.
3. Here you have edit access  **Edit access** button and a list over the members with what access they have. Press the edit access.
4. The edit access window will appear
5. Define access for member(s) or team(s).
6. Administrators
7. Others: This is the access for all others then yourself, with an exception from admin user. The drop down menu has some options.
 - No access
 - Read
 - Write and Read
 - Full access (all admin users)
8. Owner: This is the access for the owner of the folder(s) or document(s). It has the same options as in point 7.
9. You need to choose between the last three:
 - Folder and new content
Only sets permission on the folder, no sub elements. New elements will always inherit the access from the folder they are added to.
 - Folder and files
Only sets permissions on the folder, and the files that are directly in that folder. Sub-folders, or files in sub-folders will not be affected.
 - Folder and all subfolder and files
Sets the permissions on the folder, and all sub content of that folder, both folders and files
10. Click save and the access control is done.

18.5 Members Administrator

For Members there are two types of access control:

1. Members/ Teams Permission settings
2. Who can invite new members

18.5.1 Members Permission settings Administrator

To edit the members/ Teams permission settings:

1. Go to Members in the main menu.
2. Click on the member or team you want to edit access on.
3. Under permission setting you can choose between Administrator or Member.
 - Administrators have complete control of the project and can access all settings apart from others user settings and private library setting.
 - Members have the same rights as administrators apart from inviting or removing members, creating and deleting models and changing project settings.
4. To save the rights click the Set rights button

18.5.2 Who can invite members Administrator

1. Go to settings in the main menu on the left.
2. Under access control on this page you have “Invite new member”. Click on it.
3. A list of who can create and Edit access will appear. Click the Edit access button.
4. Define access for member(s) or team(s).
5. Under the member(s) or Team(s) you have selected will appear. Under access you choose between Can invite and Not allowed.
6. Press the save button.

19. Info ⓘ

The info button you will find in the main menu.

19.1 About

This button will take you to the homepage for Catenda and from there you can learn more about Bimsync.

19.2 Contact

This button will direct you to the contact site for Catenda.

19.3 Blog

This will take you to the Catenda Blog on the homepage of Catenda.

19.4 Developer API

This will direct to the Bimsync API information page on Catenda homepage.

19.5 User manual

You found the user manual.