

# Scope Box Synchronizer

This is a tool used to import and synchronize scope boxes between linked projects.

The main features of the tool are:

- Selecting a Revit link with Scope Boxes
- Importing Scope Boxes from the other project
- Synchronizing the link's Scope Boxes with yours

Before starting the tool, make sure that you have linked a Revit project that contains Scope Boxes. After importing a Revit link into the host project start the function. A dialog box will open that shows you how many Scope Boxes there are, which ones are located in the linked project and which are in use by the host project - providing an overview of just where you have used which Scope Box.

The workflow is following:

1. Select a Revit link with Scope Boxes. If any Scope Boxes are detected in the linked project you will have the option to Import them into your project - if the name of the linked project's Scope Boxes matches any of yours, the application offers to Synchronize the linked Scope Boxes to yours and make sure that all your views which are set to a Scope Box will be set accordingly.
2. Filter Scope Boxes by name. The function allows you to filter the scope boxes by their name, or by status, and even filters the scope boxes which are pinned, grouped or checked out. This enables you to easily filter out the needed scope boxes making it easier to manage them.
3. Import missing Scope Boxes from Link.
4. Synchronize the link's Scope Boxes with yours. After the link is imported and the desired changes are made to the scope boxes, or even some scope boxes get deleted, the function enables you to manage the changes in a semi-automatic way.
5. Set the Display Order. Specify how the scope boxes should be sorted in the dialog box. Natural order is order alphabetically in the local project and then in linked project by date of creation. Link Element Order is order by element id in the linked file. Project Element Order is order by element id in the local project.

The screenshot shows the NAVIATE Scope Box Synchronizer dialog box. It features a table with columns: Scope Boxes in Link, Scope Boxes in Project, Status, Usage, and Locked. The table lists various scope boxes like 'Del 1' through 'Del 8', 'Glasgården', 'Hela Huset', 'Hus 1', 'Hus 2', and 'Del 6'. To the right of the table is a filter panel with sections for 'Filter Status' and 'Display Order'. The 'Filter Status' section includes options for 'Existing and Equal Size/Position' (6 items), 'Existing but Different Size/Position' (5 items), 'Missing in Link or Project' (1 item), and 'Pinned, Grouped or Checked Out' (0 items). The 'Display Order' section has radio buttons for 'Natural Order', 'Link Element Order', and 'Project Element Order'. At the bottom, there are three buttons: 'Import Missing Scope Boxes from Link', 'Synchronize Project Scope Boxes with Link's', and 'Close'. Numbered callouts (1-5) point to specific UI elements: 1. 'Select a Revit link with Scope Boxes' points to the 'Select Revit link' dropdown. 2. 'Filter a Scope Box by name, or use the toggle buttons below to filter by status' points to the filter panel. 3. 'If there are Scope Boxes in the Link which are missing in the host project, you can import using this button' points to the 'Import Missing Scope Boxes from Link' button. 4. 'Synchronize the link's Scope Boxes with yours' points to the 'Synchronize Project Scope Boxes with Link's' button. 5. 'Select the Display Order' points to the 'Display Order' radio buttons.

Scope Boxes in Link	Scope Boxes in Project	Status	Usage	Locked
Del 1	Del 1	✓	2	
Del 2	Del 2	!	2	
Del 3	Del 3	✓	2	
Del 4	Del 4	✓	2	
Del 5	Del 5	✓	2	
Del 7	Del 7	✓	2	
Del 8	Del 8	✓	2	
Glasgården	Glasgården	!	0	
Hela Huset	Hela Huset	!	1	
Hus 1	Hus 1	!	0	
Hus 2	Hus 2	!	0	
Del 6		-	-	

# Tips and Tricks

The dialog box clearly shows each scope box that has been deleted or changed in the project. It lets you decide which ones you want to manage. If a scope box is deleted in the project, those scope boxes will be marked with blue color, and if needed, the deleted/missing scope boxes can be retrieved from the linked project simply by clicking again on "Import missing" and the scope box will be re-imported to its original place. If by any chance the Scope Boxes are moved or re-sized these changes will be marked with orange color, which means that the Scope Boxes in the host project do not match the scope boxes from the link, if there's a need to change the host Scope Boxes to their original place and size that can be managed by clicking on "Synchronize Project Scope Boxes with Link's". The ones labeled with green color are those Scope Boxes that match the size and position of the linked Scope Boxes.

Filter by Name is used for filtering Scope boxes just by typing the desired name

The status of the Scope boxes is managed with three options:

1. Scope Boxes that are existing and equal in size and position both in the linked and host project
2. Scope Boxes which exist both in the linked and host project but are different in size and Position
3. Scope Boxes which are missing either in the host or linked project
4. Scope Boxes which are Pinned, Grouped or Checked Out

The Usage column shows if a view is using that specific Scope Box.

Scope Boxes can be set by a;

- View (also 3D views)
- Reference Planes
- Grids
- Levels