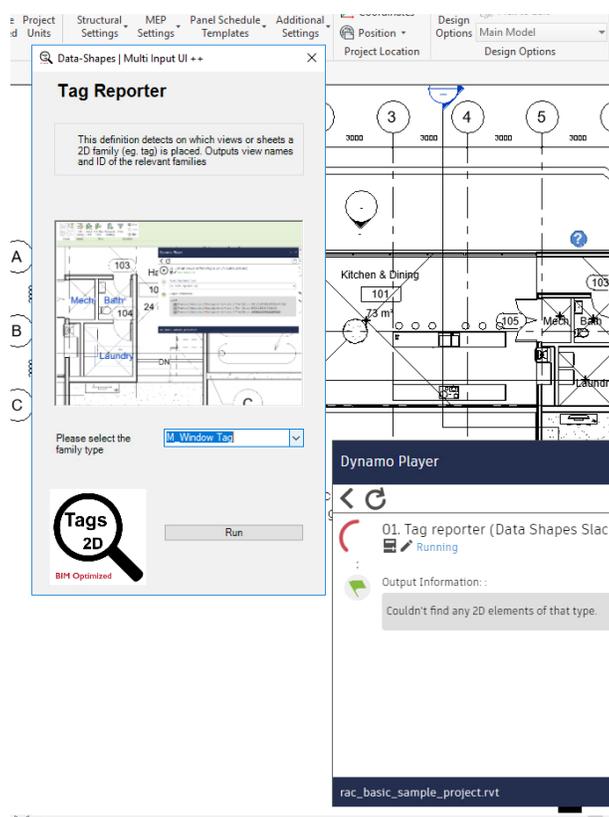


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Dynamo Starter Pack - v1.1

The purpose of this Starter Script Pack is to optimize day-to-day tasks in Revit and to introduce you to what is possible with scripting in Dynamo and Python. Our aim is to help you think and identify new ways to improve Revit processes, specific to you, and collaborate with you on a solution. The following instructional documentation describes the scripts included in your starter pack:

Important note: ensure the latest version of Dynamo is installed along with the following packages: Data-Shapes and BimorphNodes.



Tag Reporter

Use **Tag Reporter** to find the location of 2D elements. It enables you to find what views a 2D family is placed with a click of a button.

Instruction: Press play to start the **Tag Reporter**. A dialog box is displayed from which you will select from a dropdown the 2D family you want to find. Click run, and the results are displayed in the Dynamo Player.

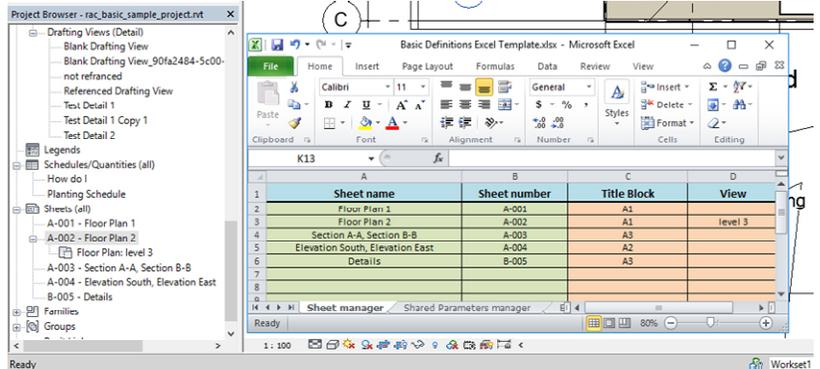
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Dynamo Starter Pack - v1.1

Sheets from Excel

Create many sheets quickly with **Sheets from Excel**. This script allows for predefined naming & numbering and creation of these in bulk.

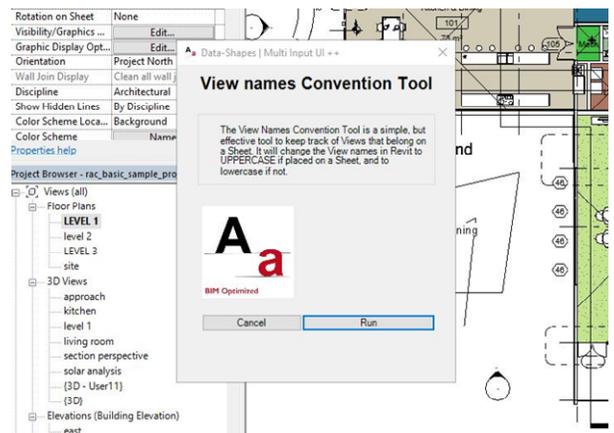
Instruction: Set up the desired Sheet Names, Sheet Number, and optionally Title Block in the *Basic Definitions Excel Template.xlsx* and then save the file. Next press play to start **Sheets from Excel**. Then browse to the Excel file and then click Run. The new sheets now exist in your model.

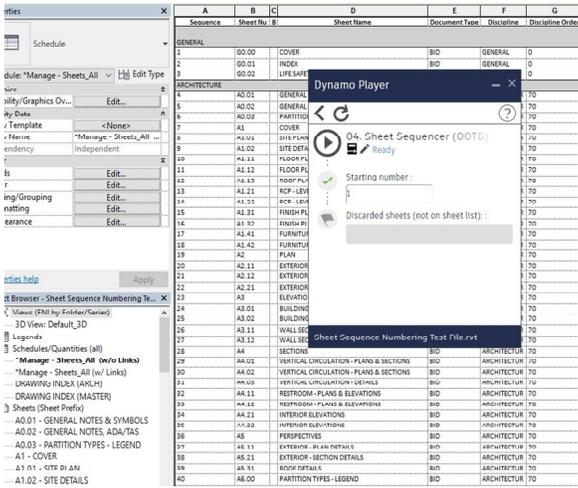


View Names Convention

Maintain view name protocol with **View Names Convention**. This allows you to visually identify whether a view is on a sheet. The script changes the view names in 'UPPERCASE' if placed on a sheet and changes to 'lowercase' if not on a sheet.

Instruction: Press play to start the **View Names Convention** script. Next click Run. All view names now follow standard naming protocol.





Sequence	Sheet No.	Sheet Name	Document Type	Discipline	Discipline Order
1	00.00	COVER	BID	GENERAL	0
2	00.01	INDEX	BID	GENERAL	0
3	00.02	LIFE SAF	BID	GENERAL	0
4	A0.01	GENERAL	BID	ARCHITECTURE	70
5	A0.02	GENERAL	BID	ARCHITECTURE	70
6	A0.03	PARTITION	BID	ARCHITECTURE	70
7	A1.01	COVER	BID	ARCHITECTURE	70
8	A1.02	SITE PLAN	BID	ARCHITECTURE	70
9	A1.02	SITE DETAIL	BID	ARCHITECTURE	70
10	A1.11	FLOOR PLAN	BID	ARCHITECTURE	70
11	A1.12	FLOOR PLAN	BID	ARCHITECTURE	70
12	A1.13	ROOF PLAN	BID	ARCHITECTURE	70
13	A1.21	ROOF LEVEL	BID	ARCHITECTURE	70
14	A1.31	ROOF LEVEL	BID	ARCHITECTURE	70
15	A1.31	FINISH PLAN	BID	ARCHITECTURE	70
16	A1.31	FINISH PLAN	BID	ARCHITECTURE	70
17	A1.42	FURNITURE	BID	ARCHITECTURE	70
18	A2.12	EXTERIOR	BID	ARCHITECTURE	70
19	A2.12	EXTERIOR	BID	ARCHITECTURE	70
20	A2.12	EXTERIOR	BID	ARCHITECTURE	70
21	A2.12	EXTERIOR	BID	ARCHITECTURE	70
22	A2.12	EXTERIOR	BID	ARCHITECTURE	70
23	A2.12	EXTERIOR	BID	ARCHITECTURE	70
24	A3.01	BUILDING	BID	ARCHITECTURE	70
25	A3.02	BUILDING	BID	ARCHITECTURE	70
26	A3.12	WALL SECTION	BID	ARCHITECTURE	70
27	A3.12	WALL SECTION	BID	ARCHITECTURE	70
28	A4.1	SECTIONS	BID	ARCHITECTURE	70
29	A4.02	VERTICAL CIRCULATION - PLANS & SECTIONS	BID	ARCHITECTURE	70
30	A4.02	VERTICAL CIRCULATION - PLANS & SECTIONS	BID	ARCHITECTURE	70
31	A4.02	VERTICAL CIRCULATION - PLANS & SECTIONS	BID	ARCHITECTURE	70
32	A4.11	RESTROOM - PLANS & ELEVATIONS	BID	ARCHITECTURE	70
33	A4.11	RESTROOM - PLANS & ELEVATIONS	BID	ARCHITECTURE	70
34	A4.21	INTERIOR ELEVATIONS	BID	ARCHITECTURE	70
35	A4.21	INTERIOR ELEVATIONS	BID	ARCHITECTURE	70
36	A5	PERSPECTIVES	BID	ARCHITECTURE	70
37	A6.11	EXTERIOR - BEAD DETAILS	BID	ARCHITECTURE	70
38	A6.21	EXTERIOR - SECTION DETAILS	BID	ARCHITECTURE	70
39	A6.11	ROOF DETAILS	BID	ARCHITECTURE	70
40	A6.00	PARTITION TYPES - LEGEND	BID	ARCHITECTURE	70



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Sheet Sequencer

Sequence all sheets hosted in the project at once. The **Sheet Sequencer** script automatically inputs numerical values in order

based on your initial starting value. This script works only with sheets/schedules using ordering parameters (e.g., *Discipline Order, Discipline, and Order*). The resulting parameter, "Sequence," is updated.

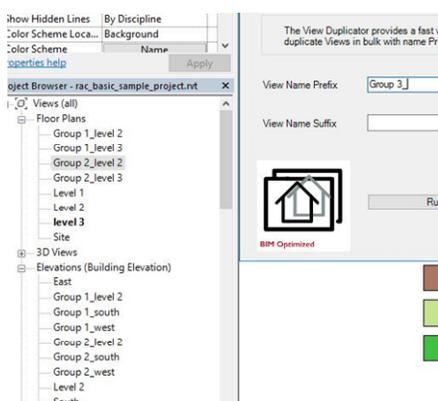
Instruction: Press play to start the **Sheet Sequencer**. Input the starting sequence number. Then click Run. The **Sheet Sequencer** populates values in the sequence parameter for all sheets effected by ordering parameters.

Multiple View Duplicator

Create copies of several views at on time with **Multiple View Duplicator**. This provides a fast way to create Working Views in bulk with name Prefix or Suffix. Consider using the ViewIt App in connection with this script.



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Object Browser - rac_basic_sample_project.rvt	Multiple View Duplicator
Views (all)	The View Duplicator provides a fast way to duplicate Views in bulk with name Prefix and Suffix.
Floor Plans	View Name Prefix: Group 3_
Group 1_Level 2	View Name Suffix:
Group 1_Level 3	
Group 2_Level 2	
Group 2_Level 3	
Level 1	
Level 2	
Level 3	
Site	
3D Views	
Elevations (Building Elevation)	
East	
Group 1_Level 2	
Group 1_south	
Group 1_west	
Group 2_Level 2	
Group 2_south	
Group 2_west	
Level 2	
South	

Instruction: Press play to start the **Multiple View Duplicator**. Fill in the Prefix and/or Suffix. Then select views in the Project Browser (*hold control to select multiple views*). Then click Run. Next, optionally, associate newly created working views to ViewIt App shortcut keys.

Reference Plane Cleaner

Maintain a clean and easily understandable model by eliminating temporary reference planes. The **Reference Plane Cleaner** will keep named reference planes and deleted unnamed reference planes.

Instruction: Press play to start the **Reference Plane Cleaner**. Then click Run to automatically remove unnamed references throughout the entire model.



Sheet Duplicator

Create an exact copy of a sheet including placed views to speed up the process of creating a set. The **Sheet Duplicator** is useful to with or without the views placed. Create sheets in bulk by selecting multiple sheets.

Instruction: Press play to start the **Sheet Duplicator**. Fill in the Prefix and/or Suffix. Select whether to duplicates already placed views. Then select sheets in the Project Browser (*hold control to select multiple sheets*). Then click Run.



Duplicate Inspector

Identify duplicate types with the **Duplicate Inspector**. This script detects whether parameter values are equivalent throughout a specific category. This inspection tool facilitates the clean-up of a disorderly created model. This script currently adapted to work with **Basic Walls, Text, and Dimensions** only.

Instruction: Press play to start the **Sheet Duplicator**.

Then click Run. A resulting list of duplicate items are listed in the Dynamo player.

Color Driver

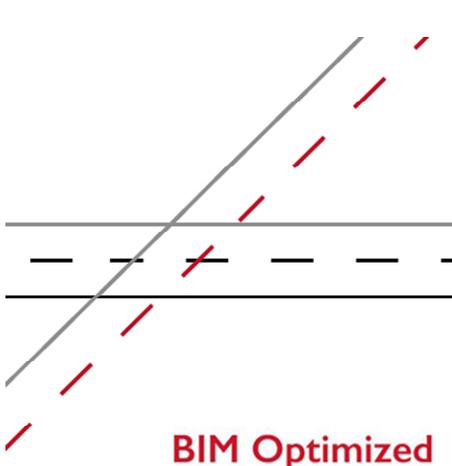
Visually identify elements that match your parameter criteria with **Color Driver**. For example, it could be used to graphically express in plan the height of an element over a set limit or show walls with certain Fire Rating value.

While this function is like applying view filter, this function is designed to be a one-time application, unlike a view filter.



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Instruction: Press play to start the **Color Driver**. Select the Category and define the relevant parameters criteria including appropriate operator. Then choose the color to be applied. Then click Run. The elements matching parameter criteria now match the chosen color.



Line Style Helper

Convert CAD lines to Revit lines quickly in bulk. This script helps the process of converting existing CAD details to company standard Revit Lines.

Instruction: Press play to start the **Line Style Helper**. Select existing lines/layers to be converted. Next, chose the Revit line style that you wish to convert the previously selected CAD lines/layers. Then click Run. Repeat the process until all CAD lines/layers in the current view are converted to Revit line styles. Then you can copy and paste this converted and 'clean' detail into your project.

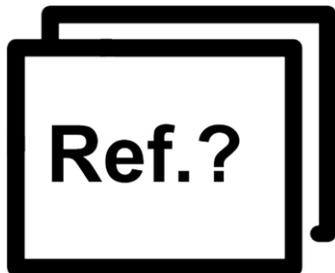
Highlight Orphaned

Highlight elements that are orphaned from their host element. This script overrides the color of an element that was orphaned from a specific category. Use this script to facilitate coordination between disciplines with hosted by face elements on linked models.

Instruction: Press play to start **Highlight Orphaned**. Select the category of elements to check. Then click Run. Elements that are orphaned or not associated in their host parameter is now shown in red – this displays in the active view only.



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View Reference Check

Protect the quality of your documentation by identifying views that are placed but not referenced or, conversely, referenced but not placed. Use this check to eliminate costly rework and miscommunication between design and construction, specific to these types of documentation errors.

Instruction: Press play to start **View Reference Check**. Then click Run. A resulting list of unreferenced or unplaced views is displayed in the Dynamo player. The user should address all listed views to ensure this quality control measure is effective.

Shared Parameter Manager

Create many shared parameters at once in bulk with the **Shared Parameter Manager**. Save hours compared to the existing repetitive and error-prone method.



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Instruction: Press play to start **Shared Parameter Manager**.

Make sure that a Shared Parameter text file (*.txt) file already exists for the project. Use *Basic Definitions Excel Template.xlsx* to fill in the

Parameter Name	Parameter group	Type Of Parameter	Visibility	Category	Data Type	Instance or Type
ToNOTSeeParam1	From Excel	Volume	TRUE	Generic Annotations	PG_TRUSS_FAMILY_VERT_WEB	INSTANCE
ToNOTSeeParam2	From Excel	Volume	TRUE	Walls	PG_TEXT	INSTANCE
ToNOTSeeParam3	From Excel	Text	TRUE	Walls	PG_FIRE_PROTECTION	INSTANCE
ToNOTSeeParam4	From Excel	Text	TRUE	Walls	PG_TEXT	INSTANCE
ToNOTSeeParam5	From Excel	Text	TRUE	Walls	PG_UNDERLAY	INSTANCE
ToNOTSeeParam6	From Excel	Text	TRUE	Walls	PG_ANALYSIS_RESULTS	INSTANCE
djogedim	frugifin	Bar/diameter	TRUE	Mass	PG_MATERIALS	INSTANCE

parameter information then save the file. Next, click Run to import all the shared parameter criteria from the excel file.



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Workset Manager

Create many Worksets instantly. Eliminate the repetitive and error-prone task of creating standard Worksets manually. Use the optional feature of assigning categories to newly created Worksets to save further on processing the model.

Instruction: Set up the desired Workset names and optional categories in the *Basic Definitions Excel Template.xlsx* and then save the file. Workset names are in the first column. Then, in the second column, choose from the dropdown the appropriate Category or leave blank if no elements from particular category should belong to it — next press play to start **Workset Manager**. Then browse to the Excel file and click Run. All previously defined Worksets are created in your model.