GRASSHOPPER TO AXISVM ADD-ON
VERSION 5.0

INSTALLATION AND UPGRADE

AXISVM X6R2* / RHINO 6 OR 7 FOR WINDOWS

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DOCUMENT REVISION 5.0.1

*) Restricted functionality is available with versions AxisVM X5R4 – X6R1.
   For full functionality use AxisVM X6R2.

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1.　INSTALLATION GUIDE

The GrasshopperToAxisVM add-on is compatible with Rhino 6 and Rhino7 as well.
AxisVM X5R4 or newer version is supported.
The add-on works only on Windows operating system.
The Grasshopper Components folder must contain one single version of this add-on, otherwise it will not work.

1) Download the latest *.gha file from the food4rhino.com website.

2) Open the folder where the file is saved. Right-click the file, open the File properties and (if required) check the Unblock option (see image below), then click OK.
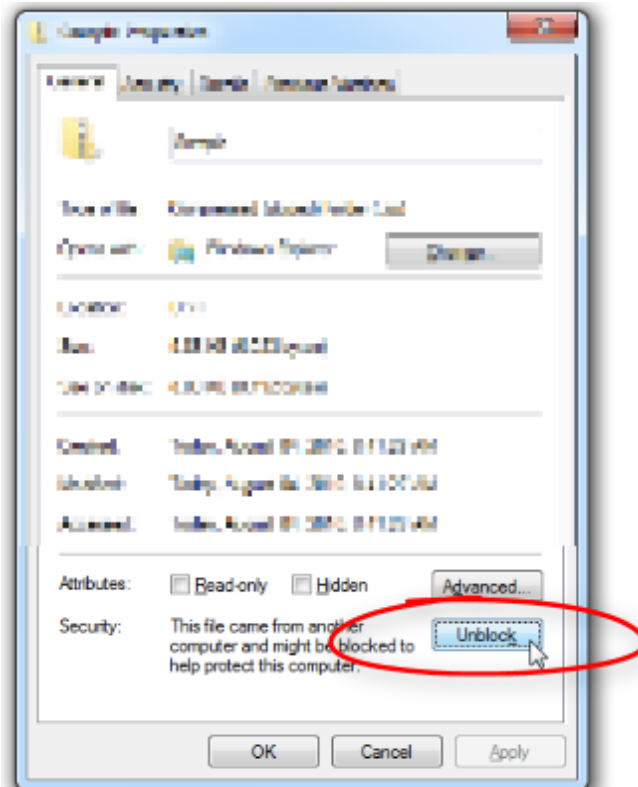
3) Copy the *.gha file into the GH Components folder (…/AppData/Roaming/Grasshopper/Libraries). You can reach this directly from file browser or via Grasshopper → File menu → Special Folders → Components Folder

4) Open the local installation folder of your AxisVM version that you suppose to use together with Grasshopper (e.g. …/Program Files/AxisVM…). Search for the Interop.AxisVM.FW4.dll file.

5) Copy the *.dll file beside the *.gha file into the GH Components folder.

6) Start (or restart) Rhino and Grasshopper.

7) The AxisVM tab must appear at the Component palettes.
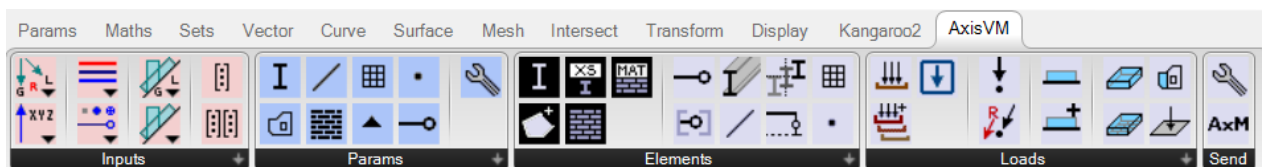
Note: after each update of the installed AxisVM software it worth to check the date of modification of the *.dll file and replace the *.dll file in the Grasshopper Components Folder in case of changes.

2.　**UPGRADE PROCESS** (FROM V4.1 / V4.2 TO V5.0)

Significant portion of the Grasshopper scripts built using GrasshopperToAxisVM add-on V4.1 or V4.2 can be upgraded using Grasshopper → Solution → Upgrade components… menu. Upgrade process is provided for each component with some restrictions, see details below.

1) Make sure that you use the GrasshopperToAxisVM V5.0.

2) Open an existing *.gh file that includes some components from the add-on GrasshopperToAxisVM V4.1 or V4.2. Each AxisVM component is going to be appear on the canvas with an OLD mark. They offer the same functionality as before (in V4.1 or V4.2).

3) In Grasshopper menu, go to **Solution → Upgrade components...**

4) Upgrade each component.

5) After the upgrade a Panel appears above the new GrasshopperToAxisVM sender component, listing the further actions to take.

Restrictions:

    a.　The **AxisVM Cross-Section** and **AxisVM Material** components lose the selected values during the upgrade. User must select cross-sections and materials in the new components.

    b.　The Beam/Rib/Truss inputs of the **AxisVM Line** and **AxisVM Mesh** components cannot be converted to the new LineType input, therefore those inputs are disconnected. The default value of LineType input is Beam. If this differs from the previously used structural element type, user must change it after the upgrade.

    c.　The implementation of **AxisVM Nodal Support** has changed. User must connect the AxPoint input into the new AxisVM Nodal Support component. User must also connect the AxisVM Supports component to the appropriate input of the GrasshopperToAxisVM sender component.

    d.　Although the components can be upgraded but the **parameters** not, therefore the parameters must be deleted and replaced with the new parameters by hand.

    e.　Components lose the modifiers of the input parameters. If the input parameters were modified by **flattening, grafting** etc., user must re-define these settings.

Hints:

    a.　If user finds **duplicated lines** in AxisVM right after the component upgrade, set the "Check double" option to TRUE on the AxisVM Settings component.

    b.　If **multiple AxisVM windows** open during the upgrade process, user may let only the latest window open and closes the others. This has no influence on the current connection.

    c.　If **Grasshopper Breakpoint** window appears during the usage of AxisVM Cross-Section or AxisVM Material component after the upgrade, user may check "Do not show these messages again" or takes a new component from the component palette by hand. (Reason: in such cases there is usually an ongoing dataflow in the background that is slower than the actions taken by the user. Functionality is not affected.)

    d.　The upgraded components are not part of any **group** on the canvas that the old component was a part of. User must add them manually.