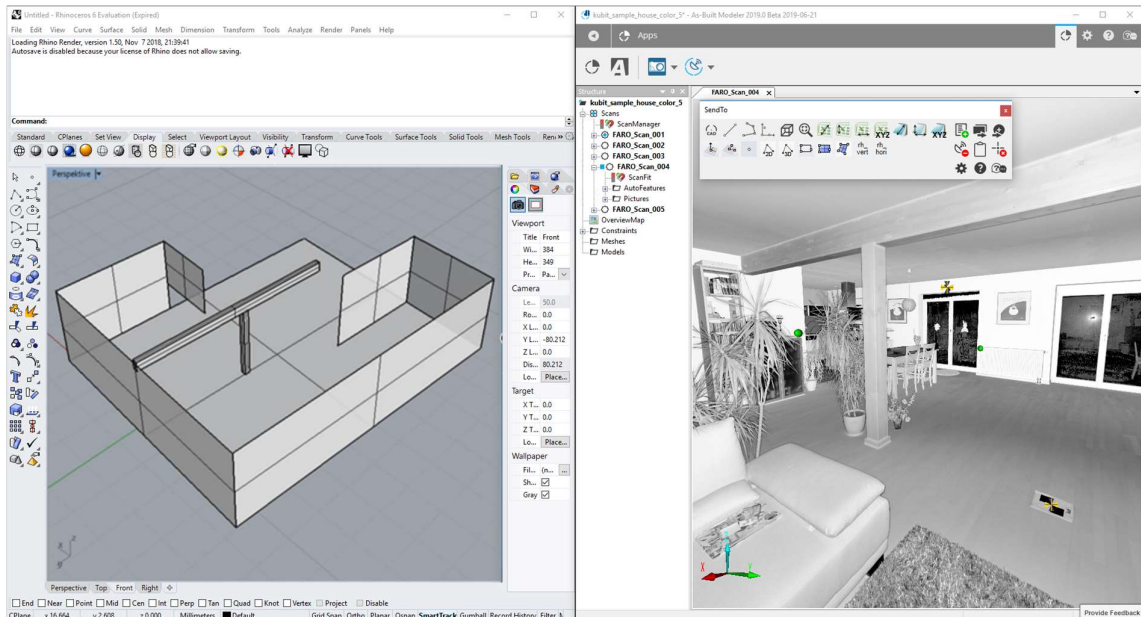




# As-Built Modeler

SendTo Macros

## Working with Rhinoceros 3D



**FARO**  
3D VISIONARY



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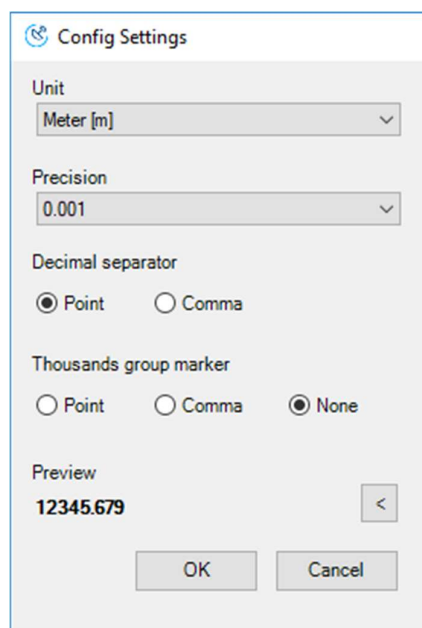
## 1 Import The Macros

1. On the SendTo panel click **Import macros** .
2. Brows to the downloaded macro file Macros\_for\_Rhino.zip
3. Click **Open**.
4. In the Import Macros dialog click >> and **OK**.
5. The macros are imported:

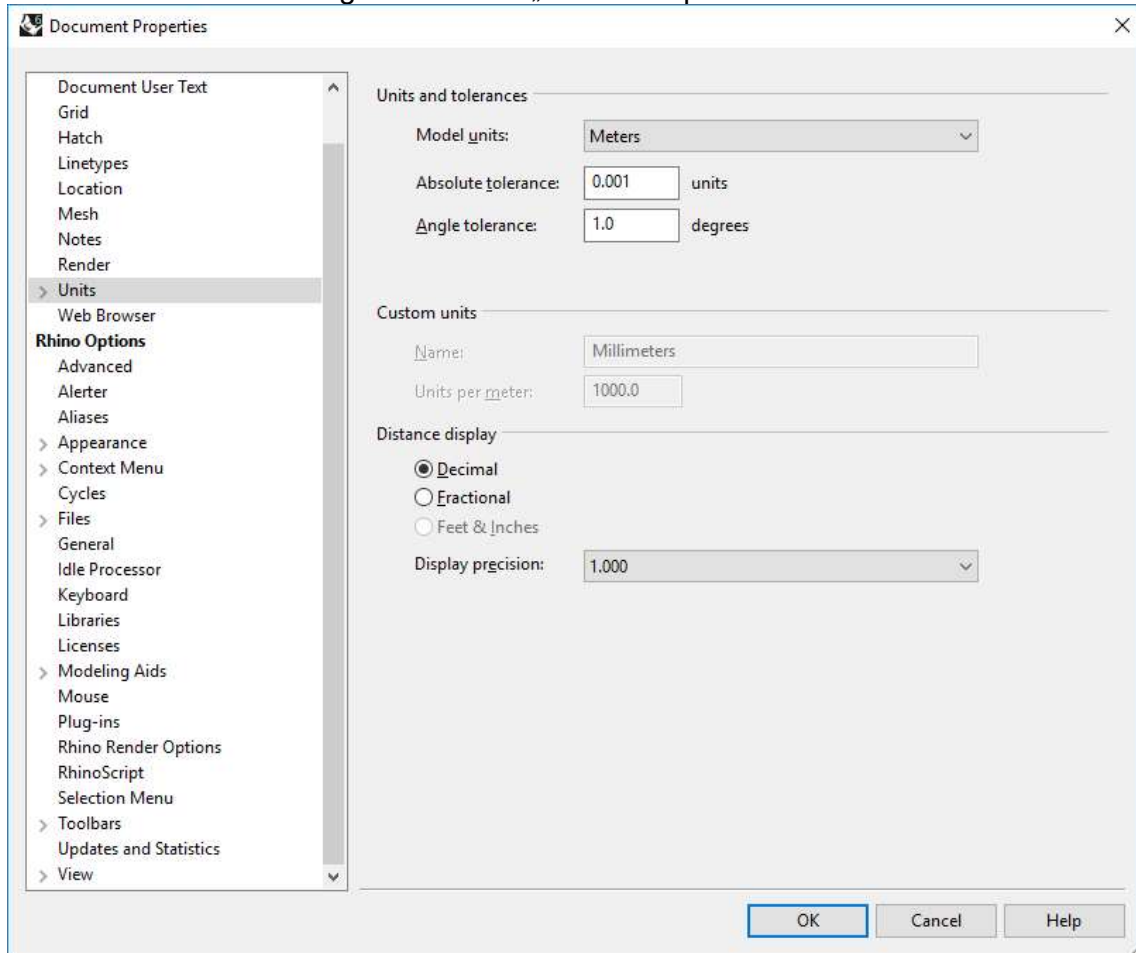


## 2 Connecting With Rhino

1. Start Rhino and open **Large projects – meters** as template.
2. Split screen between Rhino and As-Built Modeler.
3. Connect Rhino with As-Built Modeler by dragging the satellite icon  to the Rhino application window. A successful connection is indicated by a green checkmark  checkmark.
4. Ensure SendTo is configured according to the Rhino settings. In our example we work in meters in Rhino. Run **Open Settings**  and set the parameters accordingly.











5. Also check the unit settings in Rhino at „File → Properties → Units“:



### 3 Rhinoceros Macros Overview


Following table lists all pre-defined macros:

Macro	Usage	Remarks
<b>Macros for sending distances</b>		
rh_vert	<b>Click two points in scan</b> Sends vertical distance between both points	
rh_hori	<b>Click two points in scan</b> Sends horizontal distance between both points	
<b>Macros for starting Rhino commands</b>		
	<b>Click a point in scan</b> z-coordinate defines height of a new construction plane	Current construction plane will be aligned with the world coordinates. Origin of the new construction plane is 0,0,z
	<b>Click points in scan</b> Starts the command "Construction plane by 3 points"	The construction plane is created so that the x-axis lies in the xy-plane of the world coordinate system.
	<b>Click point in scan</b> Draws a point at x, y, z	
	<b>Click points in scan</b> Starts the "Polyline" command	The polyline is drawn on the XY plane of the current construction plane. <b>Caution:</b> The global coordinates of As-Built will <b>not</b> be converted into the coordinates of the current construction plane. This macro should only be used together with construction planes that have been created by shifting the world coordinates along the z-axis.
	<b>Click points in scan</b> Starts the "Polyline" command	
	<b>Click points in scan</b> Starts the "Rectangle" command with the "3points" option	Click a point on an edge, then click the second point on the end of the same edge. Click another point to define the width.

	<b>Click point in scan</b> Starts the „PlanarFace“ command with the “3points” option	Click a point on an edge, then click the second point on the end of the same edge. Click another point to define the width.
	<b>Click point in scan</b> Starts the „PlaneThroughPoints“ command	

## 4 Using The Rhino Macros

To start a macro, click its icon in the SendTo panel. This starts the command in

Rhino, e.g.  (3D Polyline) for drawing a window. Click the needed points in the scan. You may also open several scans at once and click the coordinates in different scans if needed. The macro is active until you click its icon again or select another macro or when the defined sequence is finished.

For further details regarding SendTo and editing macros see the As-Built Modeler user manual.