

# What is New in ModelPort 3.0

## USER INTERFACE

- Fixed: ModelPort Archicad UI controls are sometimes off-positioned (on scaled displays)
- Improved: Archicad edit controls - can display percentage value
- Improved: Archicad edit controls - displayed decimals are per control adjusted (makes the display more clean)
  - + Shows only important decimals (no unnecessary end zeros)
  - + In the past ModelPort had to change the Archicad unit display mode before to be able to show 3 digits
- Improved: Archicad edit controls - the step value of the spinner is never smaller than the smallest display decimal

## 3D VIEWPORT

- Improved: Follows Archicad display scale (looks better on larger monitors)
- Improved: Can handle non-ascii characters (even asian fonts).
- Changed: Uses Vulkan (instead of OpenGL)
- Improved: (OSX only) the new Vulkan view uses higher resolution than the previous OpenGL view - better image quality (on high-res displays)
- Improved: Mouse cursor changes interactively (for example over editable fields).
- Added: visual warning sign to show the scene is outside of the view.
- Improved: "No Scene to display" text + Button in case no active Scene is in the view
- Changed: View rotation is slower
- Improved: Faster display in 3D window
- Improved: Faster polygon operations
- Added: New view camera modes (Bottom/Back/Right).
- Removed: Debug Geometry tools from the GL view options ("Show Vertex Ids for Selected" and "Show Edge Ids for Selected")
- Removed: Scene "shadow" display (in scene selection mode)
- Changed: Library part name - it was "[FBX] Model" - now it is "Import Object"
- Improved: Library part name - is click-editable
- Improved: Scene dimensions - values are click-editable (set exact size for the imported object easily)
- Improved: Scene dimensions - dimension which is perpendicular to the camera is automatically hidden (ortho views)
- Changed: Scene dimensions - text is aligned to the axis now (not always horizontal)
- Improved: Speed indicator - changes are animated -> provides better visual feedback.
- Improved: Speed indicator - shows the original scale too (in reduced mode)
- Improved: 3D Axis (bottom-left corner) - can be visible in ortho views too (this is the default)
- Improved: 3D Axis (bottom-left corner) - shows the axis letters too
- Fixed: 3D Axis (bottom-left corner) - is not always visible.
- Improved: Grid - fits to the object size (Always bigger than the scene geometry - similar to Archicad).
- Improved: Grid - transparency is different when seeing the grid from the Z or from the -Z direction.
- Changed: Grid - grid size is a fix number now, easier to see the correct object size.
- Improved: Middle clicking on the geometry sets the camera target point there. (It will be the center of the rotation)
- Improved: Light with Archicad sun mode - In case ModelPort viewport uses the AC light, changing sun position in Archicad changes the light in the ModelPort views too
- Fixed: Light with Archicad sun mode - works inconsistently
- Changed: Antialiasing - x3 mode was replaced with x2 mode
- Improved: Antialiasing - changing antialiasing sample mode is immediate (no need to re-open the ModelPort dialog)

## KEYBOARD CONTROL

- Improved: Esc key - Clear current selection
- Improved: Delete/Backspace key - Delete actual selection (only locator items/meshes)

## ITEM LIST (view)

- Improved: Preview icons for Scene items
- Improved: Preview icons for Material items
- Improved: Preview icons for Texture items
- Improved: Unused Material or Texture items are shown in RED color
- Changed: In non-material selection mode, Mesh - sub-materials have different icon
- Added: Drag and Drop for materials (from the Item List to the ModelPort 3D view - Windows Only).
- Improved: Right click context menu - can delete Materials and Textures too
- Added: Right click context menu - new menu item "Rename item" to start editing the item name
- Added: Right click context menu - new sub-menu "Select"
- Changed: Right click context menu - select "All Meshes" is under sub-menu "Select"
- Added: Right click context menu - new menu item "All Materials" under sub-menu "Select"
- Improved: In material selection mode "Item List" tab shows the textures which have no parent material.
- Improved: More consistent display of the items. It remembers if the list item was expanded or not and keeps this status between changes.

## PROPERTIES (view)

- Added: Material preview sub-view
- Added: Scene (GDL image) preview image
- Added: Texture preview image
- Changed: It is possible now to set the Custom folder for Object and Texture import inside the edit field (not just with the browser button)
- Improved: The actual Library save mode can be stored as default.
- Changed: Position of the Rotation order pop-up has been changed
- Removed: Save Mode blue-ish help text (was confusing for some users)
- Changed: Material parameters are shown as percentage.
- Changed: Locator transform scale values are shown as percentage.
- Changed: Library part "Re-Scale" value is shown as percentage.

## 3D FILE LOADERS (FBX/Assimp)

- Improved: Used FBX version changed to 2020.2.1
- Improved: Used Assimp version changed to 5.1.3 (my experience: it works better than the 4.x version in case of newer files, but sometimes worse with older files)
- Improved: (Assimp loader) In case more textures are available for a material, importer uses the top-most texture (previous version read the bottom texture).
- Added: gltf - Graphics Library Transmission format (via Assimp)
- Added: x3d format - successor of VRML (via Assimp)

## BROWSER

- Improved: The file thumbnails are in Alphabetic order (on some system it was not in Alphabetic order).
- Improved: Right click context menu - "Remove Thumbnail" works now on multi-selection too.
- Improved: Right click context menu - "Delete..." works now on multi-selection too.

## OTHER

- Improved: While holding the Shift key the ModelPort 3D view is in paint selection mode.
- Changed: Material (Floor View) "Flat" mode was renamed to "Fill Color" mode.
- Improved: New Material (Floor view) mode "Flat", which shows the color of the 3D object, but without lighting.

- Changed: "Freeze poly-reduced geometry" is "Freeze geometry" geometry. It is not just a name change but the behavior was also changed. It freezes not just the Poly-reduction mode, but also the other mesh modifier flags (align, normals, etc.)
- Improved: ModelPort does automatic self-checking (for missing file components) at plugin start.
- Improved: Multi - Scene editing. There can be more open scenes (Library Objects) in the ModelPort editor
- Improved: In case of new Archicad project ModelPort doesn't close the opened scenes.
- Changes: In ModelPort Preferences dialog: "Default Importers" is called now "Default Loaders"
- Changed: "Update Preview/Browser image" is called now "Capture View"
- Improved: In case of opening Archicad library part in ModelPort, it reads its preview picture too from the library object.
- Improved: Batch Import mode - Import many files with a few clicks.
- Fixed: Plugin doesn't save the textures files (during import) in case the texture folder already exists.
- Improved: Plugin opens dialog to show the default value has been set to the new value.
- Improved: Floor view shows contour inside the same mesh where there are different materials around the edge.
- Fixed: Blinking of the UI

# UI Comparison Old - NEW

## ModelPort 3.0

ModelPort

Import Object abalos\_and\_FGD\_snug\_chair\_rattan\_fbx\_upZ

Import Object aáééóöðúüü澆

Text inside the 3D view can display non-ascii characters, asian fonts,...

Preview icons (for scenes, materials and textures)

ITEM LIST

- abalos\_and\_FGD\_snug\_chair\_rattan\_fbx\_upZ
- abalos\_and\_FGD\_snug\_chair\_rattan
  - Camera
  - Directional Light

PROPERTIES

Visible Name abalos\_and\_FGD\_snug\_chair\_r...

Transform

	X	Y	Z
Position	0.0	0.0	0.0
Rotation	0.0°	0.0°	0.0°
Scale	100.0%	100.0%	100.0%

Mesh

Display

Mesh Operations

- Align Polygons
- Flip Polygons
- Recalculate Normals 60.0°

Triangulation Minimal 4.5°

Detail Level - Full

Normal Decimation Steps 2

Freeze geometry

Editable controls in the 3D view. (with tooltips)

1341.5341 Set Scene Dimension 2

TriNum Selected: 17116  
TriNum Visible: 17116

Perspective Shaded

This version of ModelPort was not Activated!  
ModelPort runs in DEMO mode.

3D view text, speed indicator, etc. adapts to the scale of the Archicad UI. (easier for the eye, better for high-res monitors)

## ModelPort 2.0

ModelPort

[FBX] Model abalos\_and\_FGD\_snug\_chair\_rattan\_fbx\_upZ

ITEM LIST

- abalos\_and\_FGD\_snug\_chair\_rattan\_fbx\_upZ
- abalos\_and\_FGD\_snug\_chair\_rattan
  - Camera
  - Directional Light

PROPERTIES

Visible Name abalos\_and\_FGD\_snug\_chair\_ratt...

Transform

	X	Y	Z
Position	0.000	0.000	0.000
Rotation	0.00°	0.00°	0.00°
Scale	1.000	1.000	1.000

Mesh

Display

Polygon Operations

- Align Polygons
- Flip Polygons
- Recalculate Normals 60.00°

Triangulation Minimal 4.50°

Detail Level - Full

Normal Decimation Steps 2

Freeze poly-reduced geometry

Lot of extra zeros (Fixed 3 decimals for length values and 2 decimals for degrees)

Wrong alignment of Spinners (Windows scale)

Still normal display

TriNum Selected: 17116  
TriNum Visible: 17116

Perspective

This version of ModelPort was not Activated!  
ModelPort runs in DEMO mode.

3D view text, speed indicator, etc. scale is fixed. (can be very small on high-res monitors) for