

# vivien Release 2018

Thank you for installing *vivien* Release 2018. These release notes provide information about documentation and known issues related specifically to *vivien* Release 2018.

<i>vivien</i> Release 2018 .....	1
Getting started with <i>vivien</i> 2018 .....	3
Documentation sources .....	3
Sample files .....	3
CAST Forum .....	3
Useful information .....	3
Vivien Virtual Event Designer compatibility with <i>wysiwyg</i> .....	3
Operating system compatibility .....	4
Hard drive compatibility .....	5
Visualization Requirements.....	5
Video card compatibility.....	5
Membership requirements for Vivien 2018.....	6
Customer Experience Improvement Program (CEIP) .....	6
New features and enhancements in Vivien 2018.....	8
General Application Enhancements .....	8
Dongle Security Update .....	8
Signed Executable .....	9
Custom Library Objects Loaded On-Demand to Preserve Memory.....	9
Document Options > Wireframe Details Updated.....	10
Fixture Hang Proximity added in Document Options.....	11
Scene Database Enhancements .....	11
AutoCAD 2018 File Importing Supported .....	12
Drawing (CAD) Features .....	12
Library Item - Specify Insertion Point .....	12
Library Snaps .....	14
Tools Toolbar Update - Mid Grid and Library Snaps Added .....	15
Self-Snapping now available while Drawing a CAD object .....	16
Grid Clone Has Been Added to the Toolbar.....	17
Clone Enhancement - Use Object Extents .....	17
Mirroring Text Labels .....	18
Enhancements to Text Labels - Insert Smart Variable.....	19

Pipe & Drape Wizard and Object Enhancements .....	22
Printing the Imported Floorplan .....	25
Invert Selection for Objects and Fixtures .....	26
Performance Optimizations for Drawing Wireframes and Layout Views.....	27
Fixture / Lighting Features .....	28
Fixture Tab Added To Library Browser .....	28
Selecting Fixtures by Clicking Inside the Fixture Symbols .....	29
New Fixture Beam Sliders in Beam Options.....	29
Clone Along Pipe Offers Total Distance or Interval Option .....	30
Visualization Features .....	31
Alpha Beam Shadows .....	31
Alpha Blending for Virtual View Cameras .....	33
Image Manager Displays Alpha Levels in Image Preview .....	33
Updated Logic for Maximum Image Resolution for Image Manager.....	34
Increased Rendering Resolution .....	34
Virtual View Export as a Panoramic Image .....	35
AutoCAD Importing Improvements .....	36
Library Additions in Vivien 2018 .....	40
Total Library Additions .....	40
Fixes - Vivien 2018 .....	44
Known Issues .....	46
Contacting Technical Support.....	51
Copyright Information .....	51

## Getting started with *vivien* 2018

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To help you get started using *Vivien*, various resources are available for your use.

### Documentation sources

Documentation sources are available in several locations for your convenience:

- From the Vivien Install panel during installation
- On your Windows computer, click Start > Programs > CAST Software > Vivien 2018 shortcut menu (once *Vivien* has been installed)
- All *vivien* documentation is available for download from the CAST web site: <http://www.cast-soft.com/>

Sources include:

- User's Guide
- Getting Started Guide
- Release Notes

### Sample files

Sample *Vivien* files are provided with the installation for you to use as examples or references. These files can be found in the \Samples folder where you installed *Vivien* (e.g., C:\Program Files (x86)\CAST Software\Vivien 2018\Samples).

### CAST Forum

CAST has launched the CAST Forum, <http://forums.cast-soft.com/>. The Forum is open to everyone and aims to serve both CAST product users as well as the entire entertainment and event production community, it is not just about CAST products. Forum members can post projects, ask questions, get technical support from the community or just browse to see what others are doing.

## Useful information

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### Vivien Virtual Event Designer compatibility with *wysiwyg*

Vivien 2018 is fully compatible with *wysiwyg* R40, and vice versa. Therefore, a Vivien 2018 file will open in R40, and files drawn in R40 will open in Vivien 2018. Note, to open a *wysiwyg* file and display fixtures and truss in vivien, please download and install the *wysiwyg* Compatibility Pack before opening the file.

While Vivien deals with the venue, *wysiwyg* deals with the stage. However, both *wysiwyg* and Vivien:

- Feature simplified CAD tools to plot or lay out floor spaces or lighting plans
- Deliver photorealistic renderings of these drawings



- Contain 1000s of library objects designed for the industry
- Share the same reliable, robust base code
- Deliver stunning visuals
- Provide Wizards for common tasks

### Operating system compatibility

*Vivien 2018* is supported on Windows 7, Windows 8.1 and Windows 10. *Vivien 2018* will not install or run on Windows XP or Windows Vista.

### Minimum system requirements (for general *Vivien* usage)

- Intel Core i3 or compatible processor, 2.0 GHz, or better
- PC running Windows 7 with Service Pack 1, Windows 8.1, or Windows 10
- MAC computer with Intel Processor platforms running Windows 7 with Service Pack 1 or Windows 8.1, or Windows 10 via Bootcamp (recommended), or Parallels Virtual Machine\*  
\**Vivien* installed on a Parallels Virtual Machine will run with limited graphical functionality, as it is running on an Integrated video card.
- 4GB RAM
- 1GB free disk space (NTFS file system)
- 1280 x 800 resolution
- OpenGL-accelerated “gaming-level” video card, with 1GB (or better) video memory and OpenGL 2.1 (minimum) support\*\*  
\*\* Integrated video cards may be used, but are not recommended.
- Free USB port

### High performance system requirements (for best response and rendering time)

- Intel Core i5 / i7 / i7 “Extreme Edition” or equivalent AMD processor, quad-core or better, 2.4 GHz or better
- Windows 7 with Service Pack 1, Windows 8.1, or Windows 10; 64-bit version of Windows OS is not required, but highly recommended
- MAC computer with Intel Processor platforms running Windows 7 with Service Pack 1 or Windows 8.1, or Windows 10 running via Bootcamp
- 8GB RAM or better, configured for dual-, triple- or quad-channel operation (depending on the memory architecture supported by the system processor)
- 1GB free disk space (NTFS file system)
- OpenGL-accelerated “gaming-level” video card, with 3GB (or better) video memory and OpenGL 3.3 support required for Deferred Rendering simulation and Volumetric Beams in Virtual Views
- No integrated video cards should be considered for such a system
- Free USB port

## Hard drive compatibility

Due to restrictions in file name length, you cannot install *Vivien* on a FAT32-formatted hard drive. Instead, you must install the product on an NTFS-formatted hard drive. For details, see <http://cast-soft.com/tech-resources/wysiwyg-and-vivien-installation-note/>

## Visualization Requirements

There are multiple levels of increasing beam simulation offered in *Vivien*.

- **Minimum Visualization Requirement:** The minimum video card requirements to display the default Enhanced Beams must support OpenGL 2.1.
- **Intermediate Visualization Requirements:** For higher level graphics offered by the Enhanced Visualization setting, your video card must support OpenGL 3.0.
- **High Performance Visualization Requirements:** To obtain the highest graphics level offered by Deferred Rendering with Enhanced Visualization, your video card must support OpenGL 3.3.

## Video card compatibility

There are two levels of beam simulation offered in *Vivien's* Virtual Views.

- **Enhanced Beams:** The minimum video card requirements to display the default Enhanced Beams must support OpenGL 2.1.
- **Volumetric Beams:** To obtain the highest graphics level offered by Deferred Rendering with Enhanced Visualization, your video card must support OpenGL 3.3 or better.

**Note:** Both Enhanced Visualization and Deferred Rendering options are required to run Volumetric Beams. If these options are not available on your system, it means the graphics card on your computer does not support the necessary version of OpenGL to run Volumetric Beams. In this instance, you must use Enhanced Beams for your Virtual View visualization.

When launching *Vivien*, it will detect which version of OpenGL is supported and run the corresponding level of Enhanced Beams, and disable any advanced graphical features which are not supported. The visualization settings can be accessed in **Application Options > Simulation** tab

Both Enhanced Visualization and Deferred Rendering options are required to run Volumetric Beams. If these options are not available on your system, it means the graphics card on your computer does not support the necessary version of OpenGL to run Volumetric beams. In this instance, you must therefore use Enhanced Beams for your Shaded View visualization.

## Dongle security

Vivien is protected through a dongle security solution. Your dongle is not only the key to open your Vivien software, but it also carries a security protocol and other information embedded on it that establishes you as the registered licensee (thus protecting your investment).

The dongle security system also provides more flexibility to you, the user, because your Vivien license is stored on the dongle and can travel from one computer to another. With a portable Vivien license, you can work on whichever computer you need to use: office, home, or laptop.

## Membership requirements for Vivien 2018

Your *Vivien* dongle membership must be valid at least until December 2017 (or later) to run the *Vivien* 2018.

## Customer Experience Improvement Program (CEIP)

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CAST is always looking for new ways to improve its products in order to provide the best software for our customers. A few years ago, we introduced the **Customer Experience Improvement Program (CEIP)** into our products; it is a way to allow our customers to contribute to our software features, design and development of Vivien. However, with Vivien 2018, we are updating our CEIP and introducing a Message Center as well, to deliver messages to you through the software. As always, we encourage everyone to turn on the CEIP feature; note that if CEIP is not enabled, you will not be able to receive messages through the Message Center.

For more info related to CEIP, please visit: <http://cast-soft.com/ceip>.

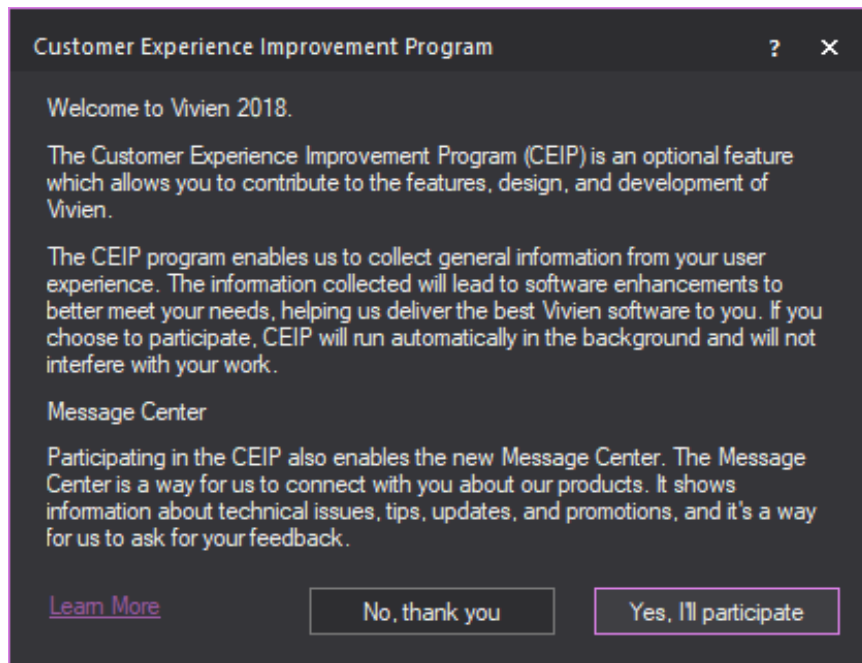


Figure 1 - CEIP dialog.

Message Center is a new feature which displays a dialog when Vivien opens. It is in-application messaging that allows CAST to deliver important messages to the user through the software. For example, if we want to share information to all users, or to only some users (based on information collected through CEIP), we would be able to send it through Message Center. Also, if there are any critical issues discovered, or suggestions on how to fix a problem (e.g. update your graphics drivers to avoid a crash), we can send this information directly through Vivien, and you would see it the next time you launch the software. But as mentioned earlier, to receive these messages CEIP must be enabled.

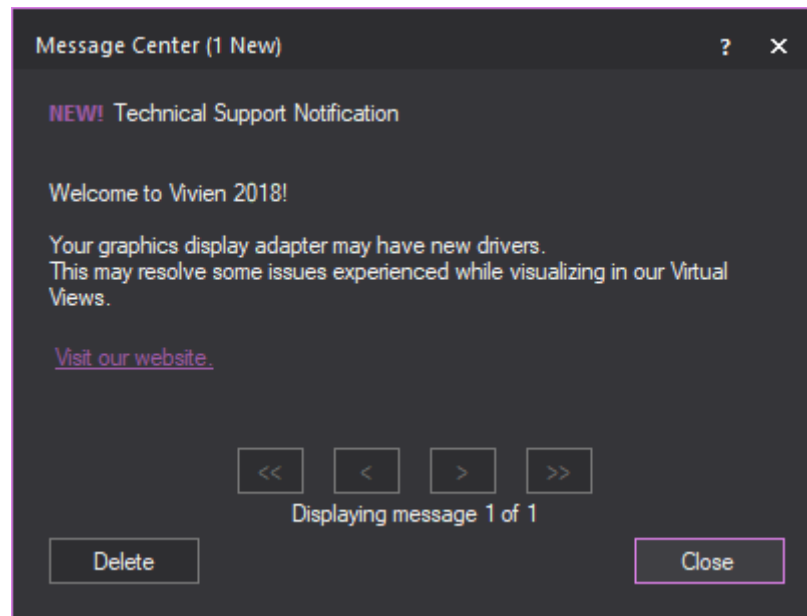


Figure 2 - Message Center.

## New features and enhancements in Vivien 2018

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In addition to numerous library updates, *Vivien* 2018 includes the following new features and enhancements. For details on these new features, please see the Vivien User's Guide.

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### General Application Enhancements

#### Dongle Security Update

An increased level of security has been introduced into the *Vivien* 2018 release. *Vivien* will continue to work like it did before using your current dongle, so you should not experience any differences in your workflow. If you do, please report them to our Technical Support team, [techsupport@cast-soft.com](mailto:techsupport@cast-soft.com). This security update is part of our efforts to keep your investment and our investment into *Vivien* protected from non-customers. We appreciate all of your support over the years, and often reporting to us when illegal copies have



surfaced. Thank you in advance for your patience as we continue to make some security updates in the never ending battle against software piracy.

## Signed Executable

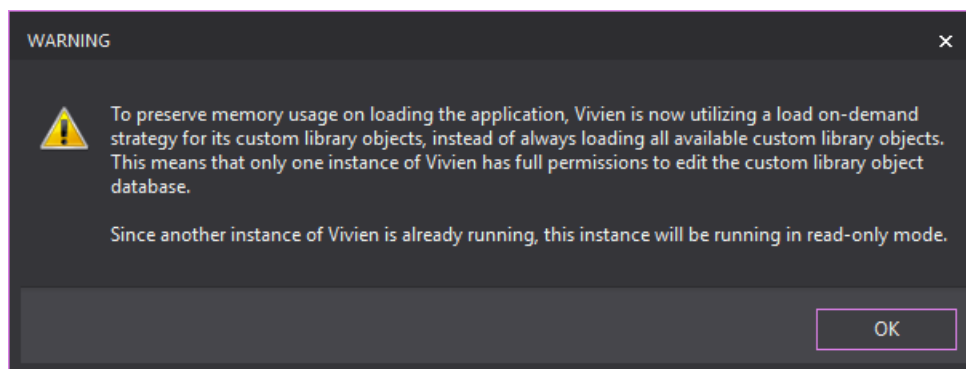
The executable files (.exe) and the installer for Vivien 2018 have been signed with a digital certificate. This should improve confidence when, for example, Windows SmartScreen prompts to allow the installer to run. The Publisher should be listed as:

CAST Group of Companies Inc.

## Custom Library Objects Loaded On-Demand to Preserve Memory

To preserve memory usage on loading the application, Vivien is now utilizing a load on-demand strategy for its custom library objects, instead of always loading all available custom library objects. This means that only one instance of Vivien has full permissions to edit the custom library object database.

When a second instance of Vivien is launched, a warning will be displayed to inform that the second instance will be running in read-only mode.



**Figure 3 - Screenshot of the new Warning message when a second instance of Vivien is launched.**

Running two instances of Vivien in order to actively work on two files at once is still not recommended. A second instance should only be launched if an object needs to be copied from a file to the file currently being authored—and closed as soon as the copy operation is

complete; the better option, however, is to use Vivien’s Save As > Selected Objects feature to move objects between files.

## Document Options > Wireframe Details Updated

The Document Options > Wireframe Details tab has been updated to a table with checkboxes.

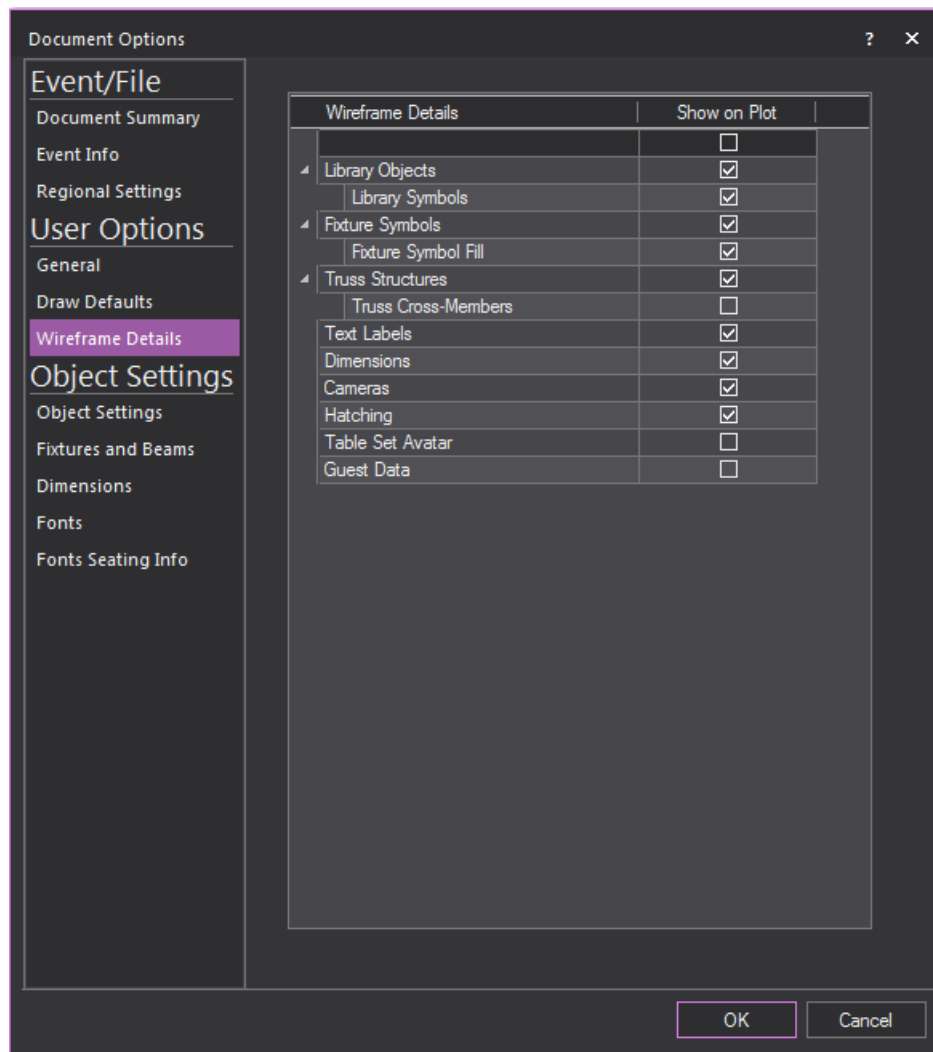


Figure 4 - Screenshot of the updated Document Options > Wireframe Details tab.

## Fixture Hang Proximity added in Document Options

A new Fixture Hang Proximity option is available in Document Options > Fixtures and Beams. This option allows users to adjust the tolerance when hanging fixtures on a Truss or Pipe. Use the Size scroll box to set the size of the proximity snap box that surrounds the selected fixture cursor, which affects how close the fixture cursor must be to the truss or pipe before the snap applies (i.e. before the fixture “jumps” from the cursor to the hang structure).

## Scene Database Enhancements

Some enhancements have been introduced to the Scene Database:

- **Multiple row selection:** In the Scene Database, it is now possible to select multiple Scenes listed in the Scene Database. This will make things a lot easier when multiple Scenes must be deleted in your file.
- **Scene dialog remembers its last size:** Depending on the size of your event, you may have a long list of Layers or Scenes in your file. To make it easier to work with Scenes, the Scene Database dialog will remember its last size when reopening it.

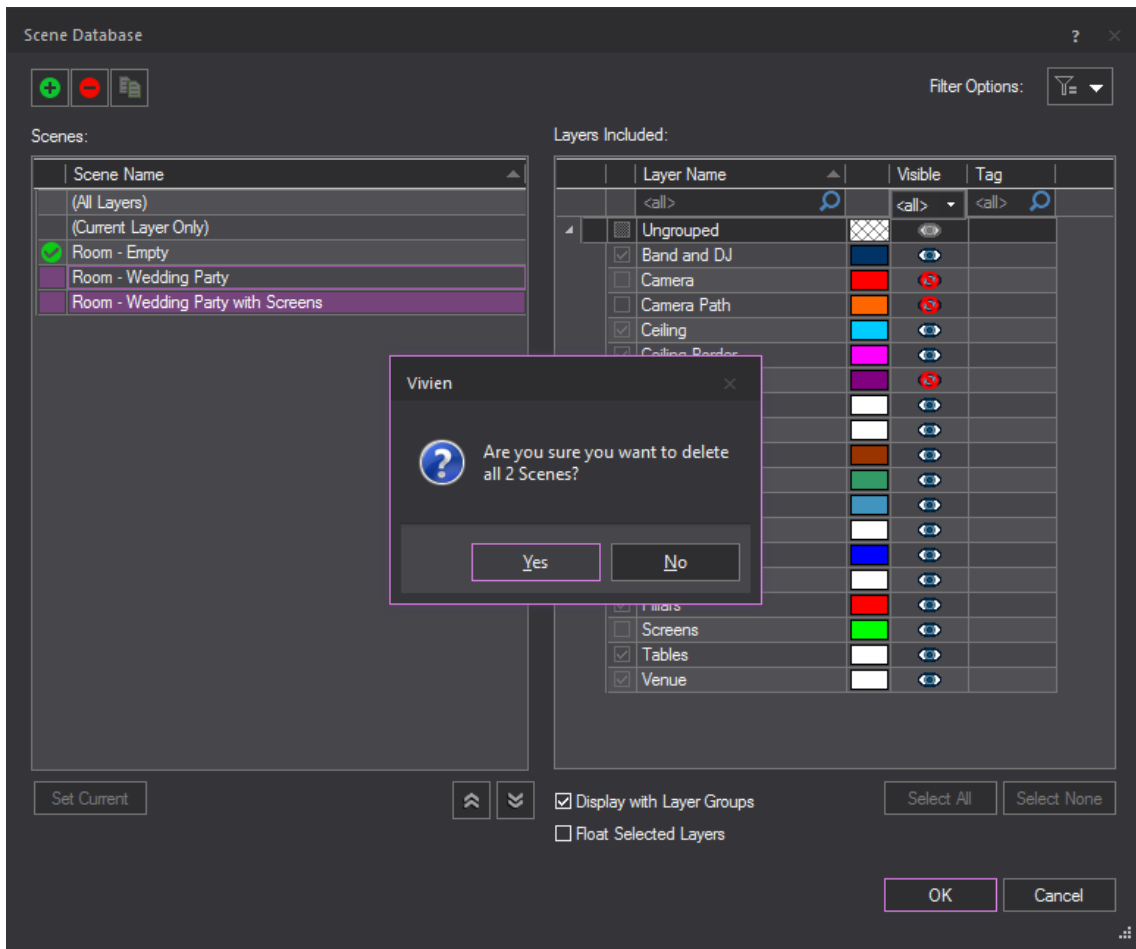


Figure 5 - Updated Scene Database displaying multiple Scenes can be selected at the same time.

## AutoCAD 2018 File Importing Supported

Vivien 2018 will import DWG/DXF files created in AutoCAD 2018.

Also, there have been many enhancements made to AutoCAD file importing, which are detailed later on in the Release Notes.

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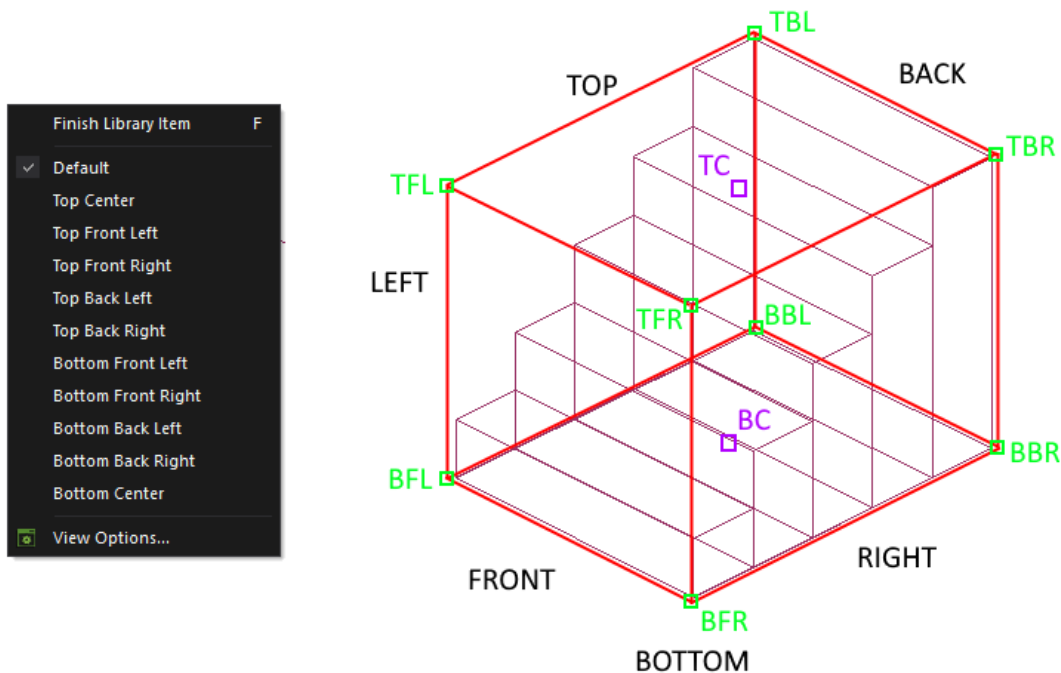
## Drawing (CAD) Features

### Library Item - Specify Insertion Point



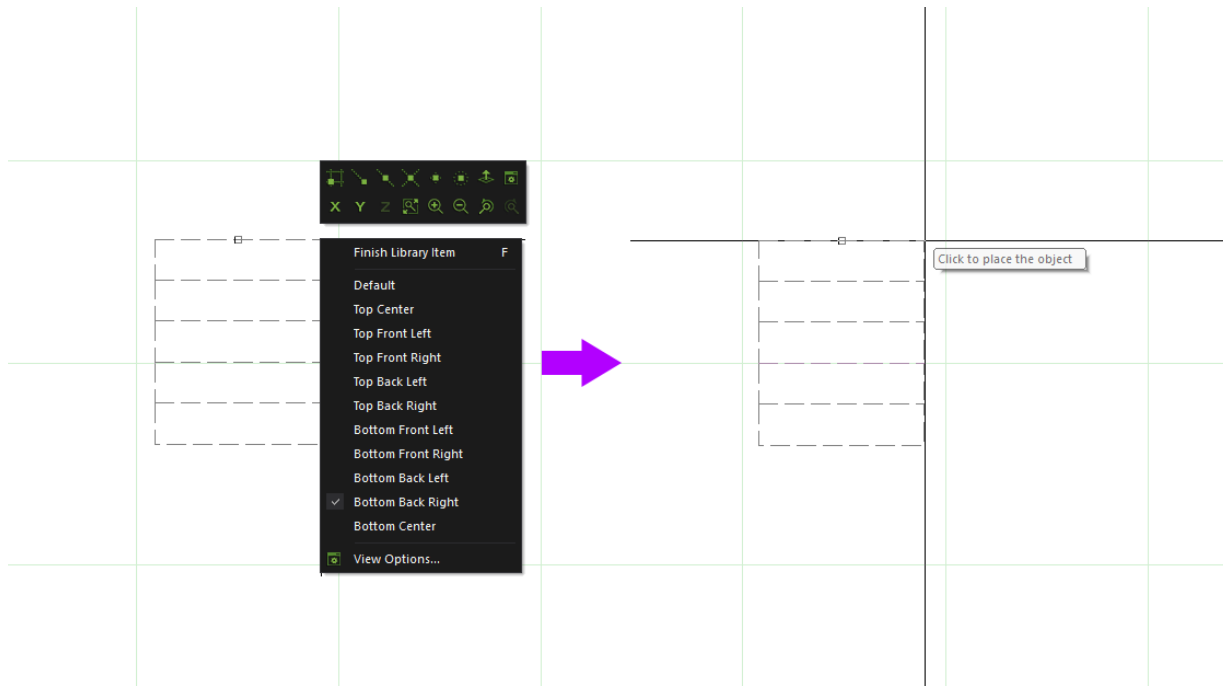
This feature allows you to select the insertion point when inserting a Library item into your drawing. Once the Library object insertion begins, right-click to access the insertion point list (as shown below in the screenshot). By default, all Library items will use their “Default” insertion point, as defined by the library model. In addition to the default, there are **10 available insertion points**. If you picture a bounding box around the Library item, you can choose from any of the top corners of the bounding box, or bottom corners, or top center, or bottom center, as shown in the image below.

Upon selecting a different insertion point, the cursor will switch to the specified point and insertion will continue with this insertion point. The insertion point is identified by a red square when Library Snap is enabled (as explained by the next section). Switching the Library item’s insertion point can help with using Snaps to insert a Library item in your drawing depending on the situation.



**Figure 6 - Screenshot showing the updated Library item insertion point options in the right-click menu, and a Staircase Library item is used to label all the insertion points around the object.**

Note: Once a Library Item's insertion point has been changed during insertion within the project, it is remembered for future insertions from the Library Browser, and will be used when performing some CAD operations such as Copy/Paste, and Move and Rotate (when object's base point is preferred in these operations).

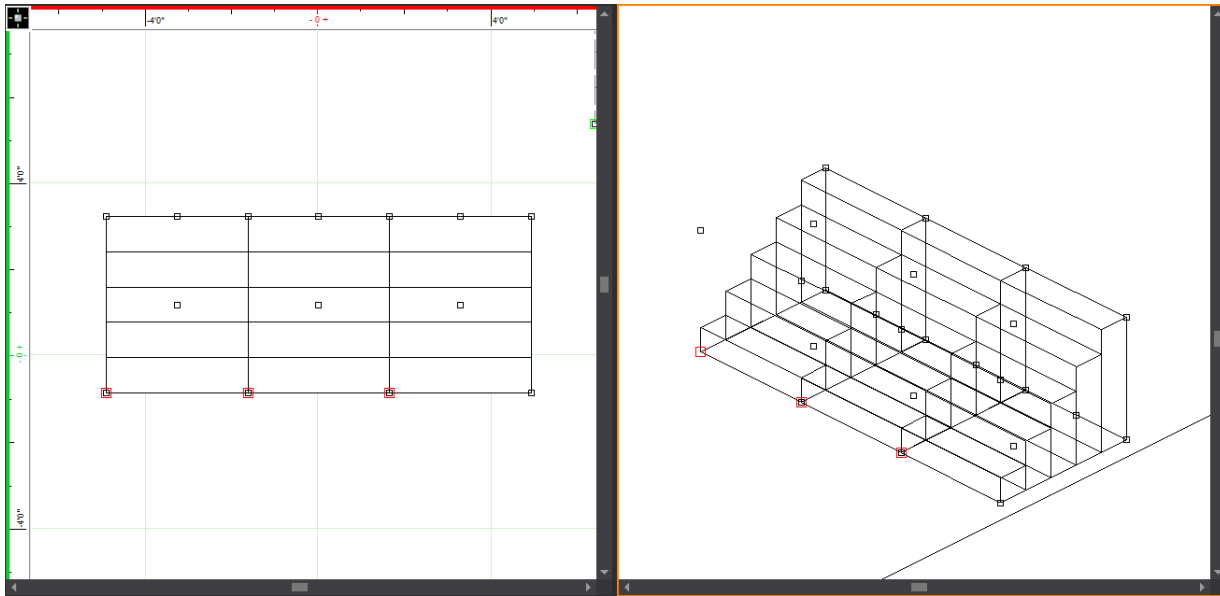


**Figure 7 - Screenshot showing the new right-click options when inserting a Library Item. In this example, while inserting the Stairs item, its insertion point was switched to Bottom Back Right.**

## Library Snaps



With the enhancements made by the Library Insertion Point feature, a related improvement is to be able to snap to any corner of the Library Object's bounding box. To make this possible, we have introduced Library Snaps, which are points drawn at the bounding box corners of a library item, and one corner will be displayed in red, to represent the library item's insertion point, which we discussed in the previous section. When the Library Snap is not enabled, the library objects which are drawn in the file will look the same as always (without points around the item). When Library Snap is enabled, all library items that are in the drawing will display their snap points, and can be used as a snappable point while you are working in the Drawing Wireframe views like any other snap point. These are especially useful when inserting modular library objects, such as Stage Platforms or Dance Floors.



**Figure 8 - Screenshot showing three Staircase library items, which were inserted with Library Snap on, and Bottom Front Left as the Insertion Point, as identified by the red points in the drawing.**

Note, during CAD operations like Move, Rotate, Mirror and Paste, the Library Snap points will be automatically turned on for your convenience, in case you wish to use them to select a base point for these operations.

### Tools Toolbar Update - Mid Grid and Library Snaps Added

Two new buttons, Mid-Grid snap and Library Snap, have been added to the Tools menu.



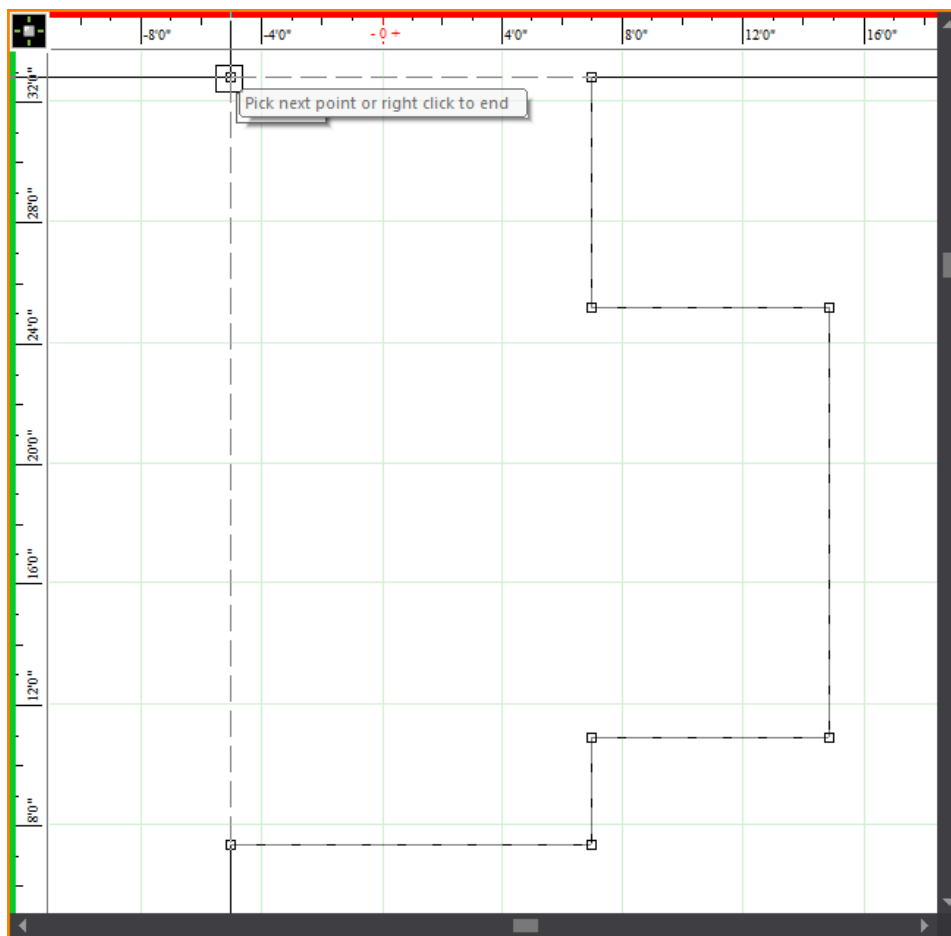
**Figure 9 - Tools toolbar offers two new Snaps, Mid-Grid (2nd button), and Library Snap (8th button).**

## Self-Snapping now available while Drawing a CAD object

When drawing a Line or Surface, or when drawing a room using the Room Builder feature, it would be convenient if snapping would work on the object that is currently being drawn, i.e. that the next point you wish to add could be based off an existing vertex/corner of the object that could be snapped to.

The scenario described is now possible for Lines, Surfaces, and Room Builder... While drawing any of these objects, all the points drawn so far will be available for end-point, mid-point, and/or intersection point snaps.

Tip: Using this new feature along with the Ortho tool can be very useful.



**Figure 10 - Screenshot of a Line object currently being drawn, and the latest vertex of the Line was defined by using End Point snap to the first point of the Line (so these points are aligned).**



## Grid Clone Has Been Added to the Toolbar



We have added a Grid Clone button to the Clone mini-toolbar, which is available on the Modify toolbar.



**Figure 11 - Screenshot of the Clone mini Toolbar. The 3rd button is for Grid Clone.**

## Clone Enhancement - Use Object Extents

In the Clone dialogs, a new button "Use object extents for interval" has been added which will automatically populate the Interval textboxes with the dimensions of the selected object.

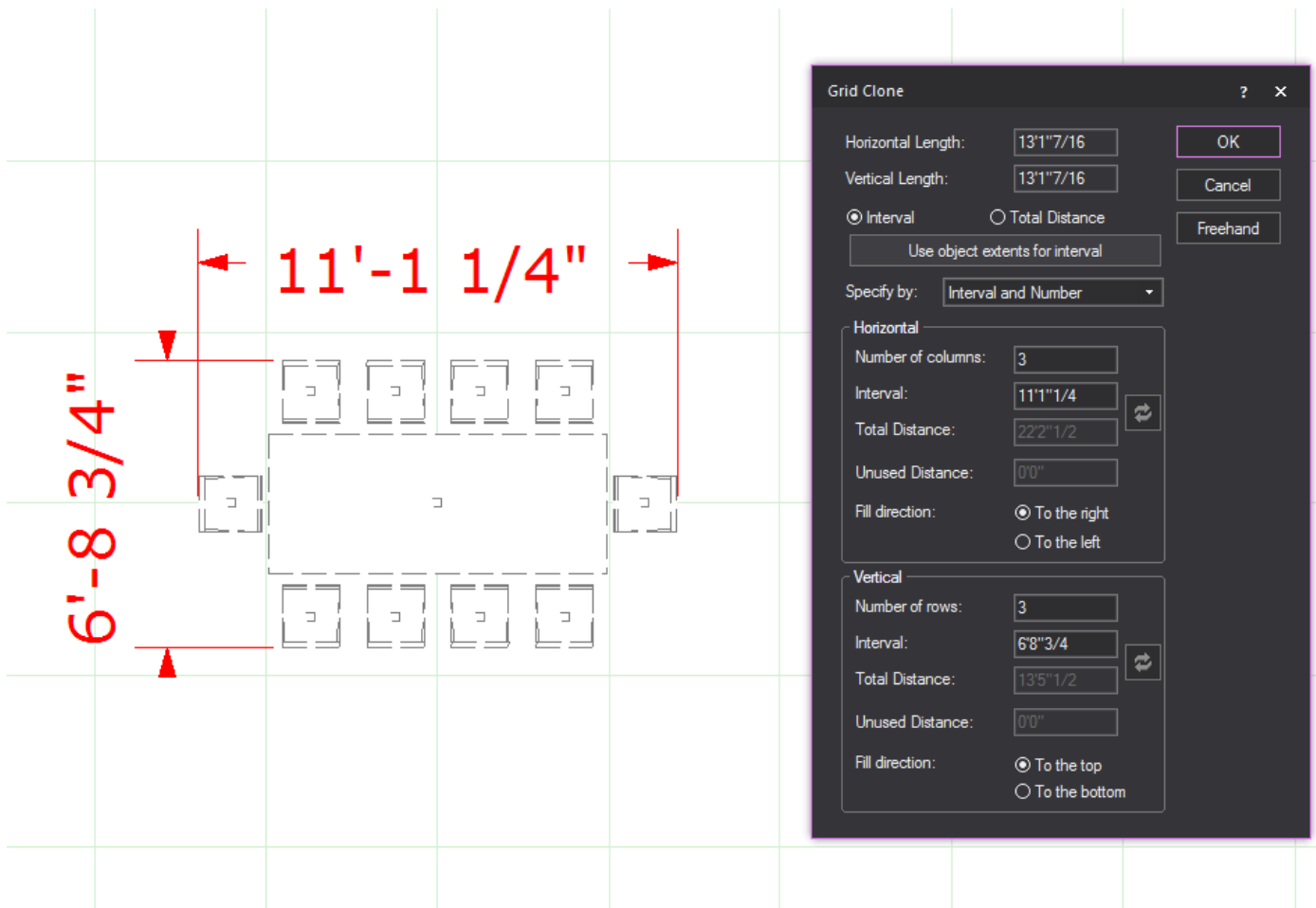


Figure 12 - Screenshot of Grid Clone dialog showing the new "Use object extents for interval" button.

### Mirroring Text Labels

When mirroring Text Label objects, the Text Label's position/rotation, anchor position, callouts and arrows will be mirrored across the mirror plane, but the text will now face the screen so it is always legible to anyone looking at the drawing. Previously the Mirror operation would reverse the text, making it appear backwards.

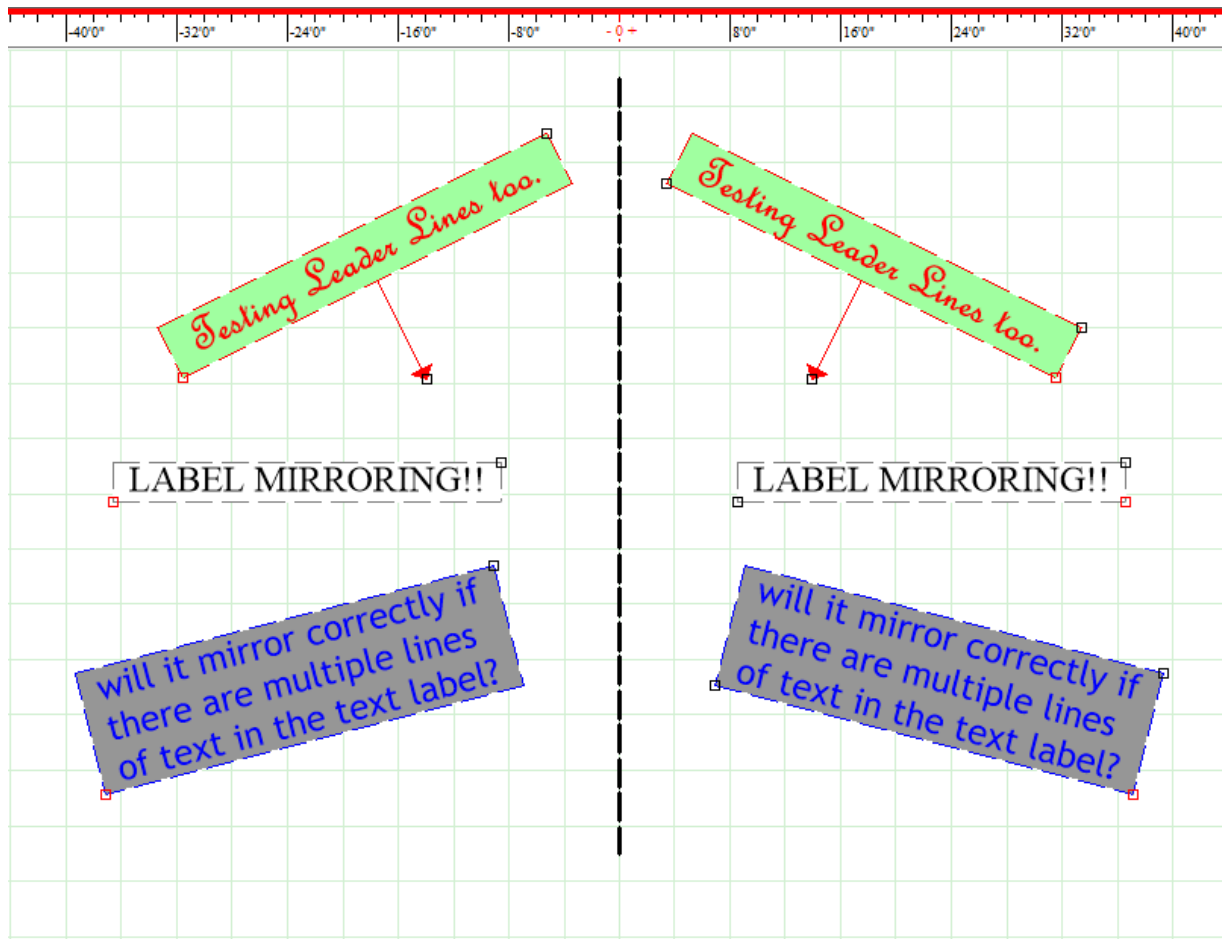
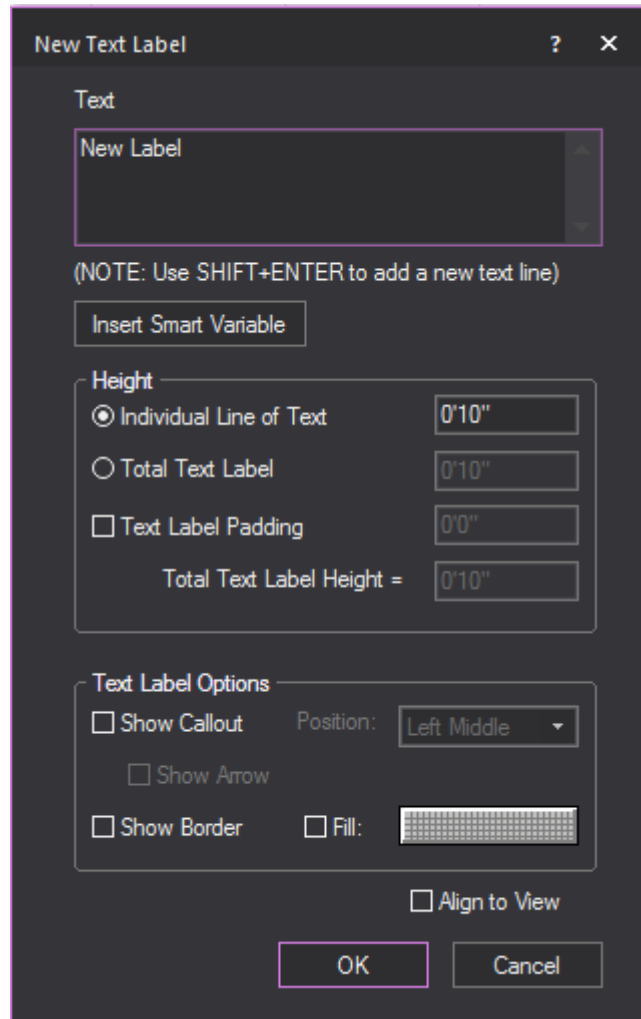


Figure 13 - Screenshot displaying results of new Mirroring logic on various Text Label object examples.

## Enhancements to Text Labels - Insert Smart Variable

When adding Text Labels to include notes into your drawing, often it is information about your Event/Show. Since this information is often already stored in the Document Options, we have added a new button to the Text Label dialog to make things easier to get Smart Variable (Event Info) inserted.



**Figure 14 - Screenshot of the updated New Text Label dialog, showing new "Insert Smart Variable" button.**

- **Insert Smart Variable:** Clicking on the Insert Smart Variable button will open the Production Team Info list. Since you already entered the information, select the row containing the text you wish to add into your text label and it will be inserted into the Text textbox.

Note, at the bottom of the dialog, there is an option to include the Variable Name, in case you wish to show both Variable Name, and its Value (information).

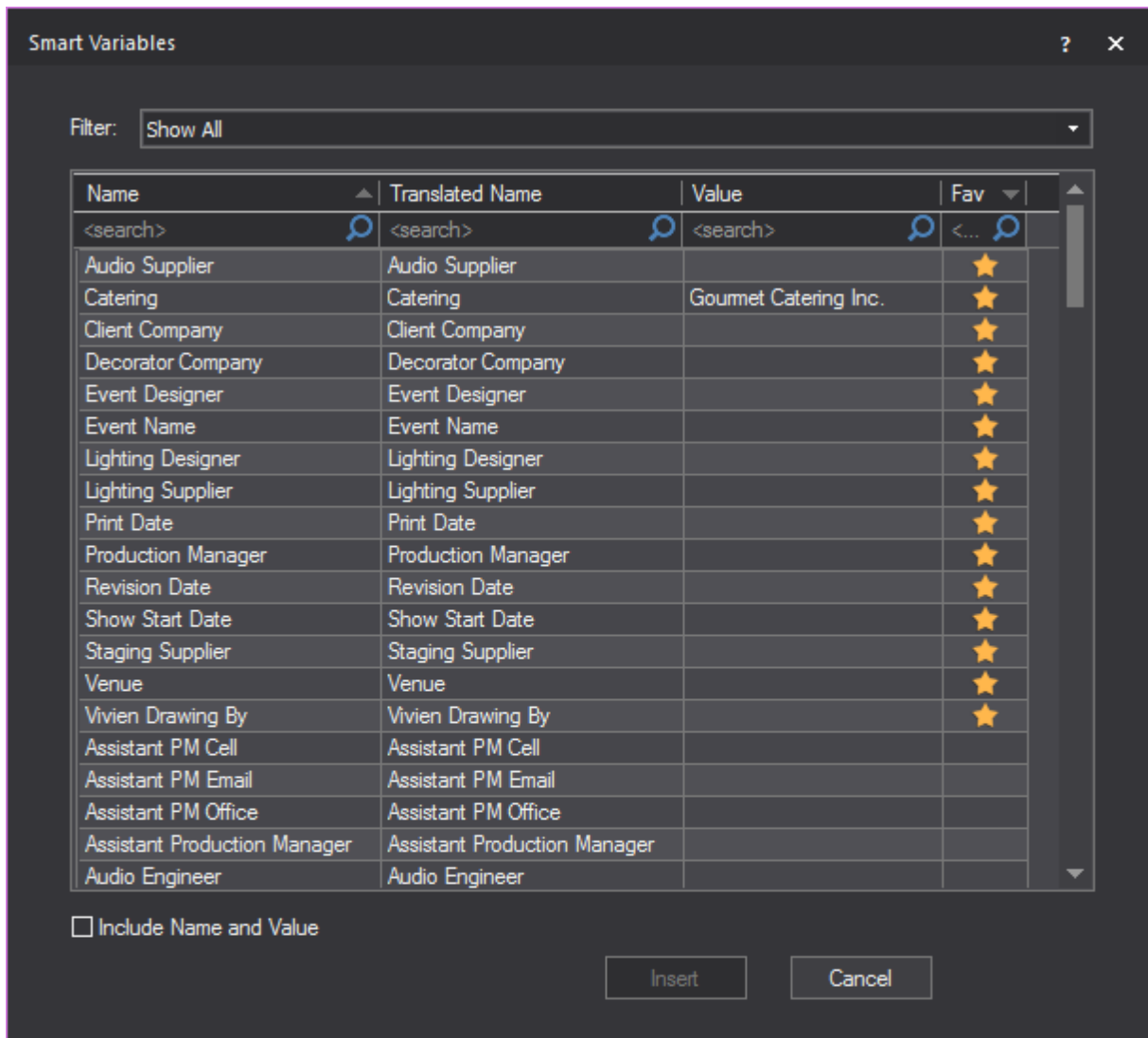
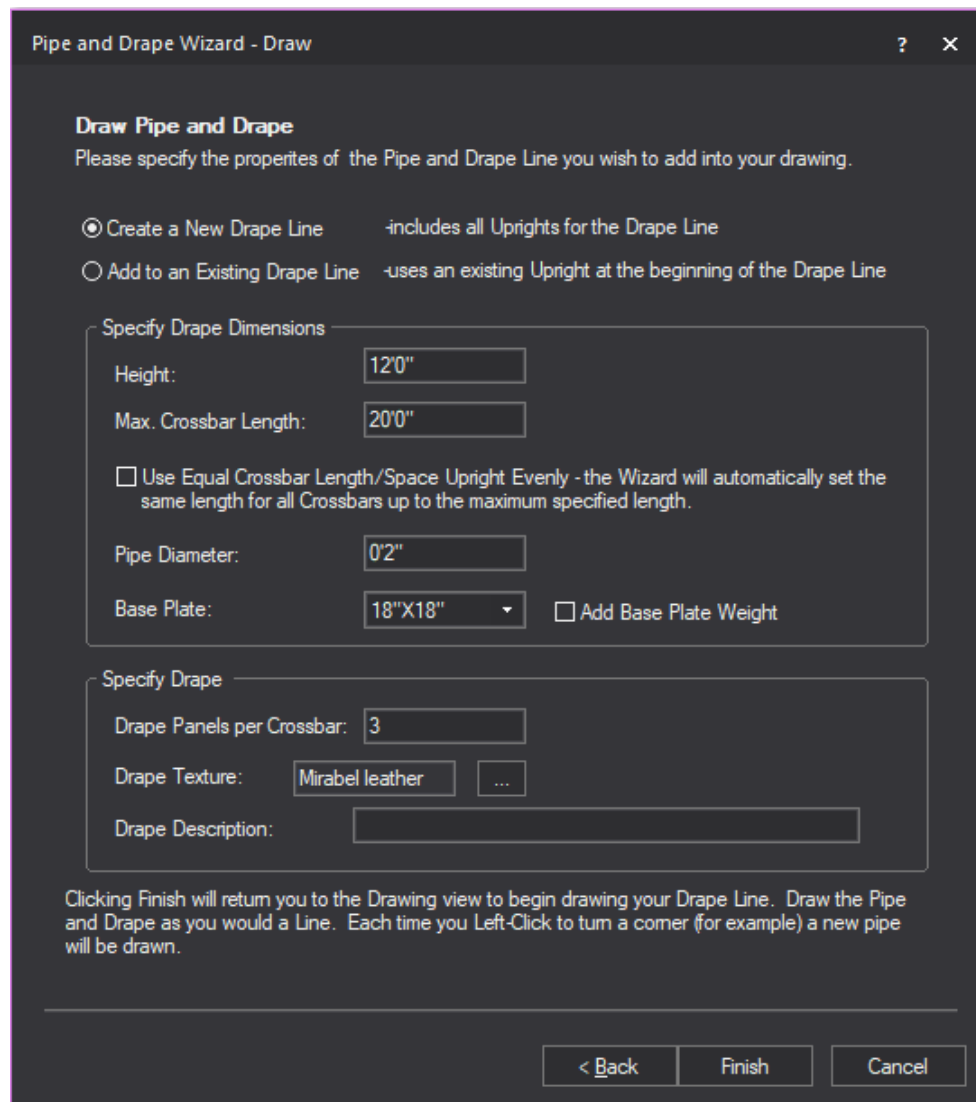


Figure 15 - Screenshots of the Smart Variables dialog, and the resulting Text Label object inserted into the drawing.

## Pipe & Drape Wizard and Object Enhancements

The Pipe and Drape Wizard has been updated to include some new functionality and options, which we believe will help you build Pipe and Drape for your events.

A new Base Plate option will help better-represent the Upright locations in the drawing. The Pipe and Drape Wizard has also been updated to include new options previously unavailable in the Wizard, and the AutoDrape option has been removed.

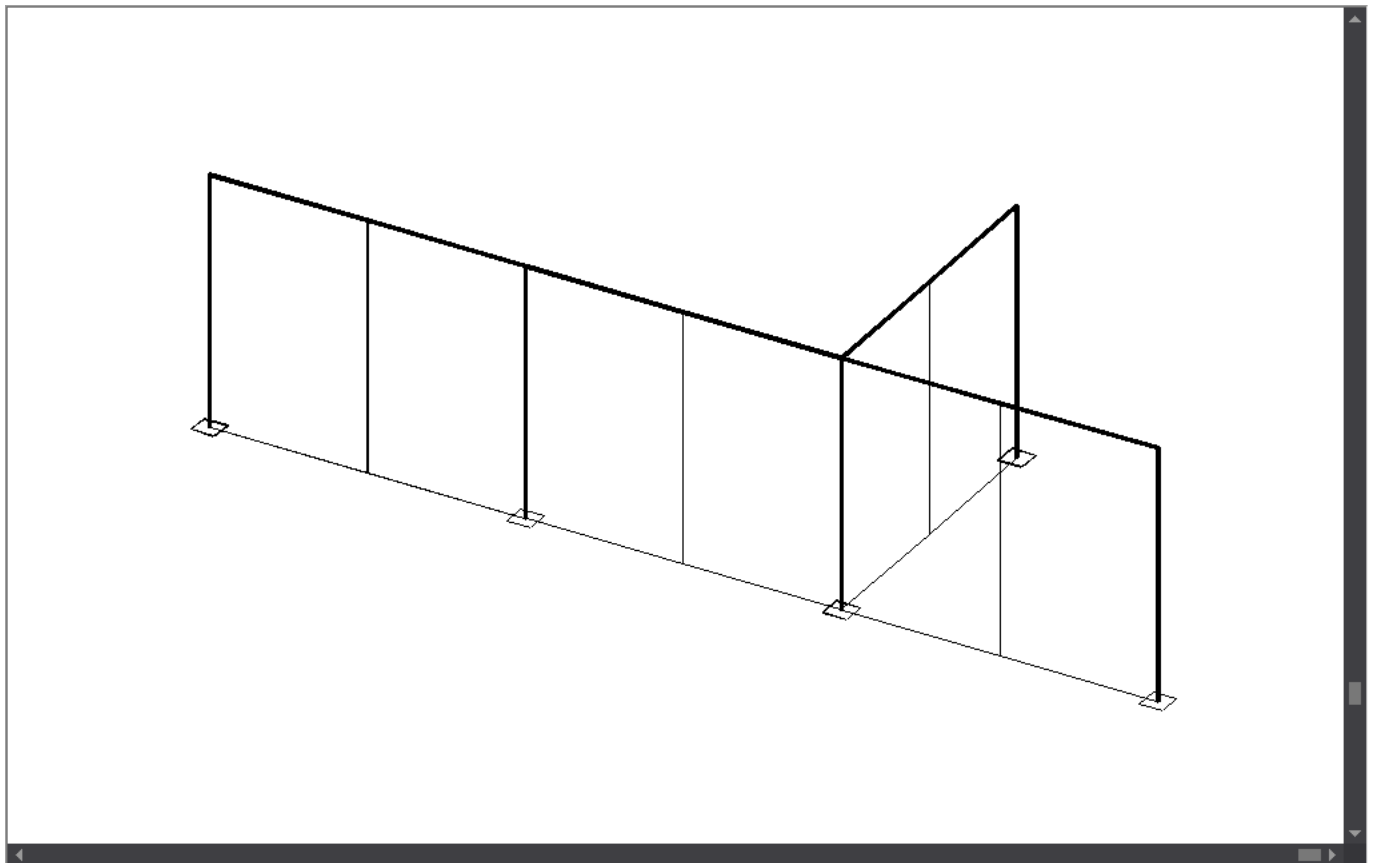


**Figure 16 - Screenshot of the updated Pipe and Drape Wizard - Draw method.**

Here is a list of all of the enhancements and changes to the Pipe and Drape feature:

- Added a Base Plate representation to the Pipe and Drape Upright object, by adding a dropdown to Wizard and Properties
- Added a Base Plate Weight checkbox to Wizard and Properties; checking this will increase the height of the Base Plate within the drawing only
- Added "Pipe Diameter" property to Wizard (previously only in object's Properties)

- Added the texture file property to Wizard (previously only in object's Properties)
- Added a Drape Description textbox to Wizard and Properties to include the Drape's catalog description, e.g. *48" Accordion Taffeta*
- Added a Drape Notes textbox to the Properties
- Added option to attach to Existing Drape Line for the Draw method
- Removed AutoDrape method, leaving only Draw and Specify methods
- Renamed "Cross Member" object to "Crossbar"
- Updated the Properties tab of the Pipe and Drape Object to reflect changes



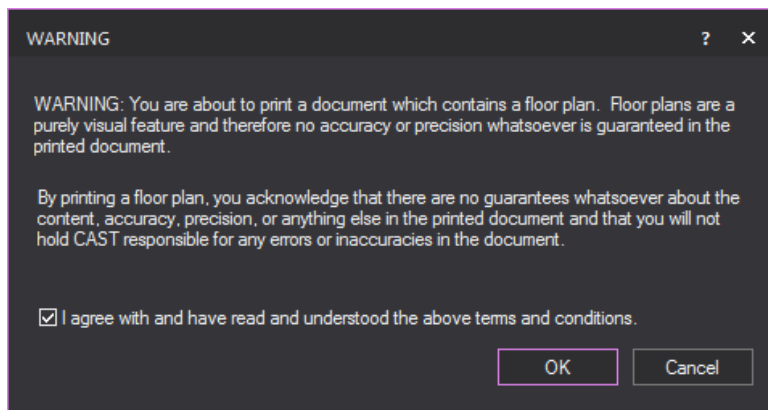
**Figure 17 - Screenshot of a Pipe and Drape object, displaying new Base Plates for Uprights.**



## Printing the Imported Floorplan

It is now possible to print an imported Floorplan image of PDF file with your paperwork. If the floorplan is visible in the CAD Wireframe view, it will also appear in the CAD object of your Layouts and in New Plots of PRES mode.

- **Attention:** Imported floorplans are a purely visual feature without any guarantee of accuracy and precision in the printed document. When printing a floorplan, a Warning dialog appears asking for you to acknowledge that there are no guarantees about the content, accuracy, precision, or anything else in the printed document and that you will not hold CAST responsible for any errors or inaccuracies in the document. Mark the checkbox and click OK to proceed.



**Figure 18 - Screenshot of the Warning dialog that appears when a Floorplan is displayed, which must be accepted by the user to print the Floorplan image.**

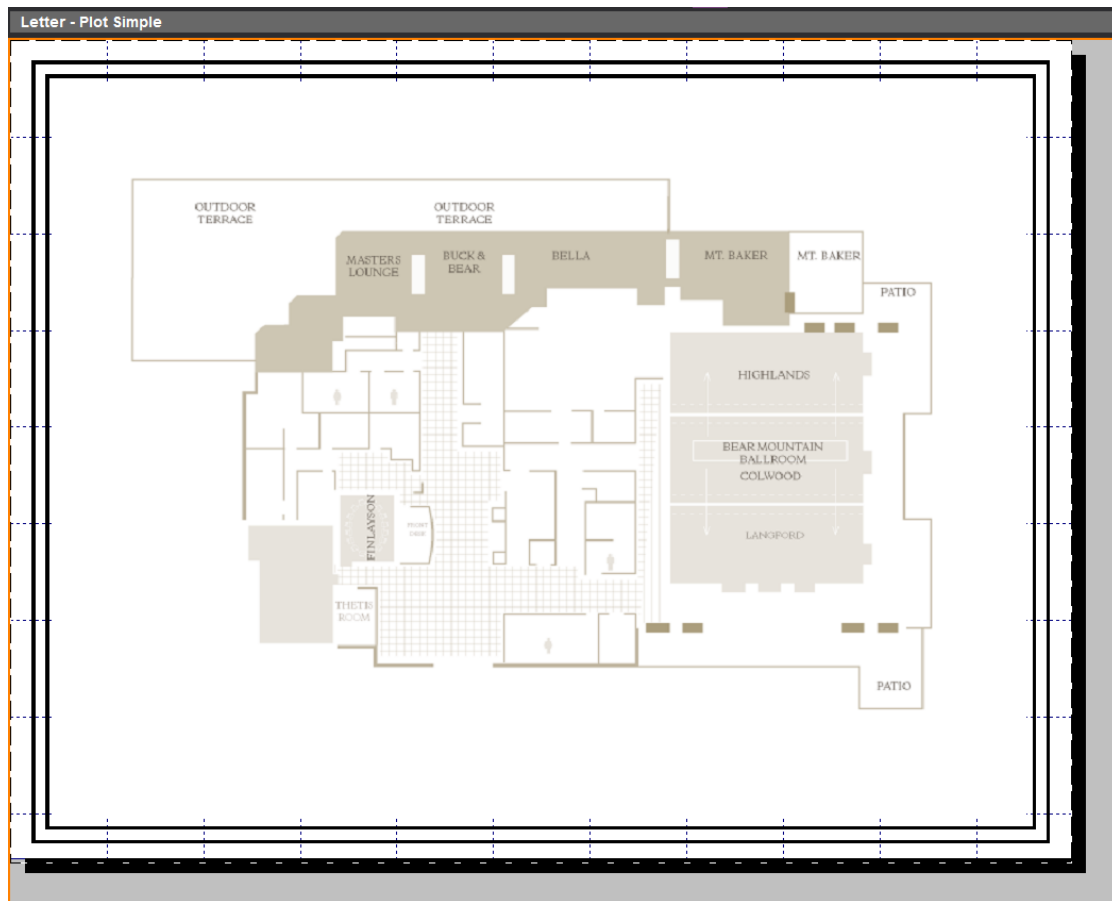


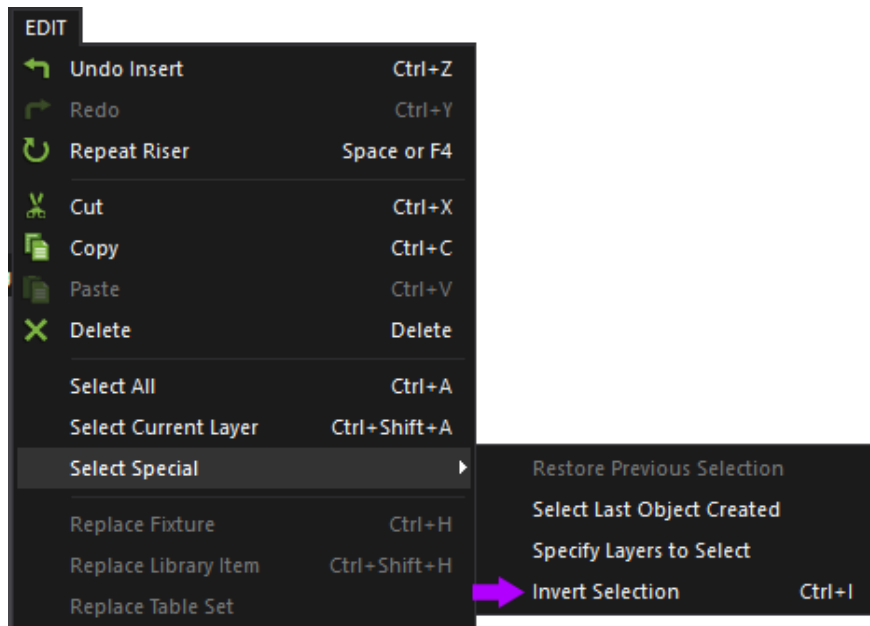
Figure 19 - Screenshot of the Layout with Floorplan displayed for print out.

## Invert Selection for Objects and Fixtures

A new object selection has been introduced in Drawing and Lighting tabs.

In Drawing Wireframe and Drawing Quad, from **EDIT > Select Special**, or press **CTRL+I** to deselect all objects currently selected, and consequently select all the other editable objects that were previously not selected.

In Lighting Wireframe, Lighting Quad and Virtual View tab, from **EDIT > Select Special**, or press **CTRL+I** to deselect all Fixtures currently selected, and consequently select all the other editable Fixtures that were previously not selected.



**Figure 20 - Invert Selection is now available from the Select Special submenu, or by using CTRL+I.**

## Performance Optimizations for Drawing Wireframes and Layout Views

Various performance optimizations have been introduced for the Drawing wireframe views and Layout views. These optimizations are related to various CAD object types, such as Lines and Text Labels, and for certain operations, such as Zooming, Panning, switching between shortcuts, and displaying right-click menus. The results of these optimizations will vary between files.

## Fixture / Lighting Features

### Fixture Tab Added To Library Browser

Since Fixtures are commonly-inserted into your drawing, we have made them easier to access from the Library. In the Library Browser, a Fixture tab has been introduced, replacing the Office tab. The items previously listed in the Office tab are now listed under Objects Tab, in a folder named Office.

Also, for everyone’s convenience, we’ve also left the Lighting folder listed in the AV tab, therefore making all Lighting items available from the Lighting and AV tabs.

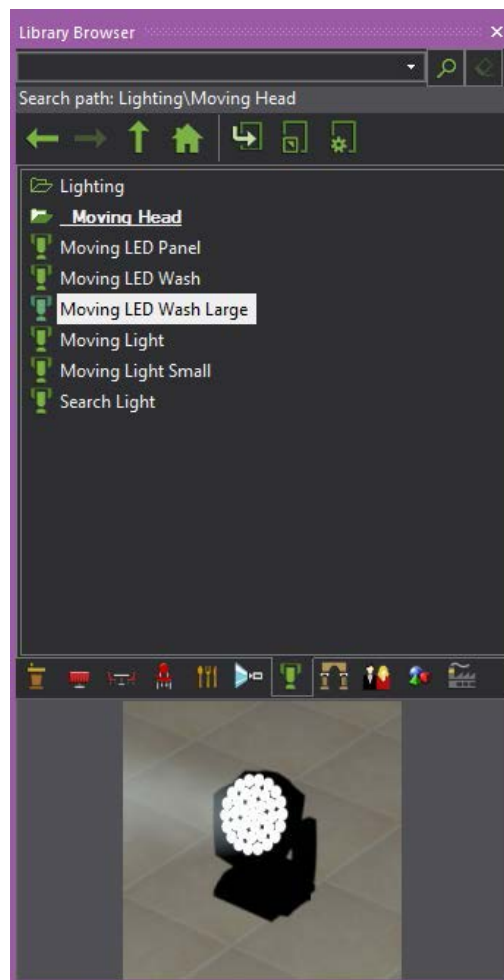
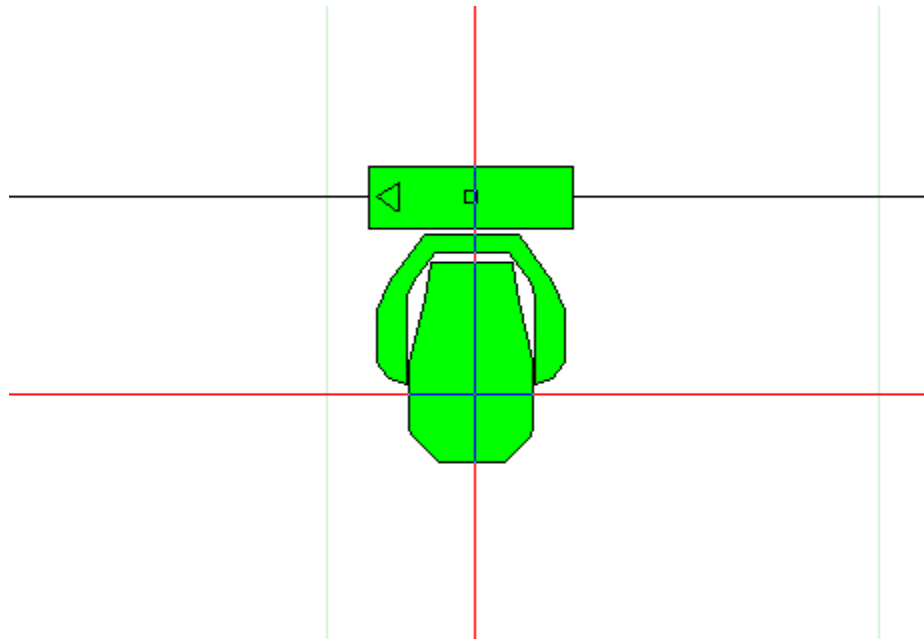


Figure 21 - Updated Library Browser with Fixture tab shown.

## Selecting Fixtures by Clicking Inside the Fixture Symbols

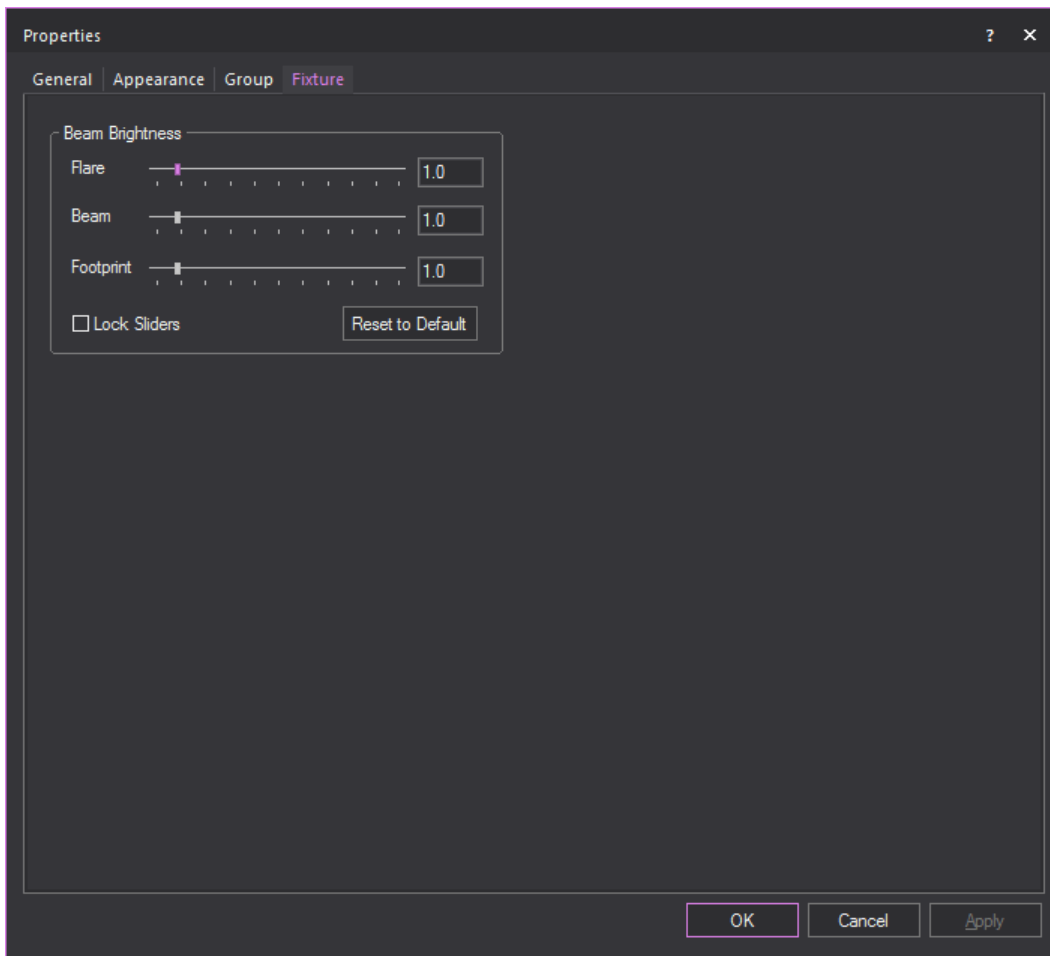
Previously, selecting a fixture in a Drawing Wireframe view required the user to click on the outline of its symbol. In Vivien 2018, you may click anywhere within its outline to select it; you may of course continue to click the outline to select, if that is what you prefer. (Note: there is no change for this in Isometric view, and you must still click one of the model's lines in order to select the fixture.)



**Figure 22 - Click anywhere inside the Fixture's Symbol to select the Fixture.**

## New Fixture Beam Sliders in Beam Options

In the properties of a Fixture, a new "Fixture" tab is available which offers "Beam Brightness" options for each Fixture object. Using the Flare, Beam and Footprint sliders, you can control the brightness of these Beam properties. If you wish to keep these settings at the same brightness level, make sure to enable the **Lock Sliders** checkbox. When you need to reset to the default 1.0 value, use the **Reset to Default** button.



**Figure 23 - Screenshot of the Fixture tab which offers Beam Brightness settings.**

## Clone Along Pipe Offers Total Distance or Interval Option

When cloning Fixtures, Clone Along Pipe now offers two options, fixture placement by interval or total distance.

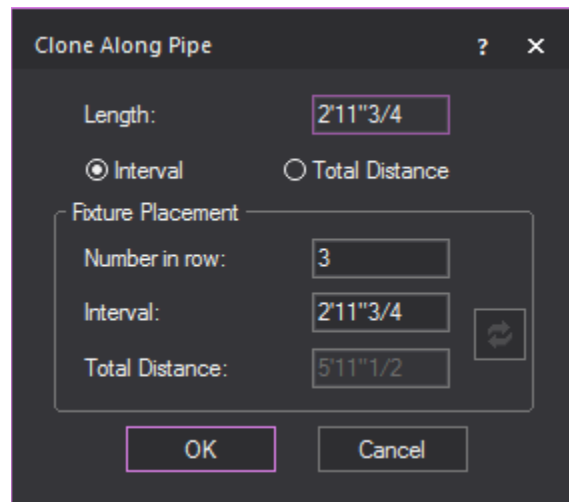


Figure 24 - Screenshot of the updated Clone Along Pipe dialog.

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## Visualization Features

### Alpha Beam Shadows

In Vivien 2017 we added the Alpha Texturing feature which introduced the ability for beams to pass through surfaces where Alpha Transparency was specified in the image.

As a follow up to this feature, in Vivien 2018, we are taking it one step closer to reality by considering the color and Alpha percentage/value in the image and altering the beam's color and intensity as it passes through the surface.



**Figure 25 - Screenshot of the new Alpha Beam Shadows feature, displaying the white beam passing through a Stained glass window texture, and the beam passing through taking the colors of the alpha texture, and the beam's intensity dropping to half the intensity as a result of the 50% alpha levels.**

To enable Alpha Beam Shadows in your Virtual View, open the **Virtual View's View Options**, and in the Simulation tab with Volumetric Beam mode set, select the "Enable" checkbox in the Alpha Beam Shadows section. Set the "Num. Levels" dropdown to the number of levels to be calculated for Alpha Beam shadows. For example, if this dropdown is set to 2, a beam's color and intensity will be calculated based on passing through 2 surfaces with alpha levels only; any additional surfaces with alpha levels will be ignored as the beam will just pass through them.

Note: Each alpha shadow level supported for this feature requires additional video memory from your graphics card, and can impact performance, depending on your scene and computer's hardware, so use this feature wisely.

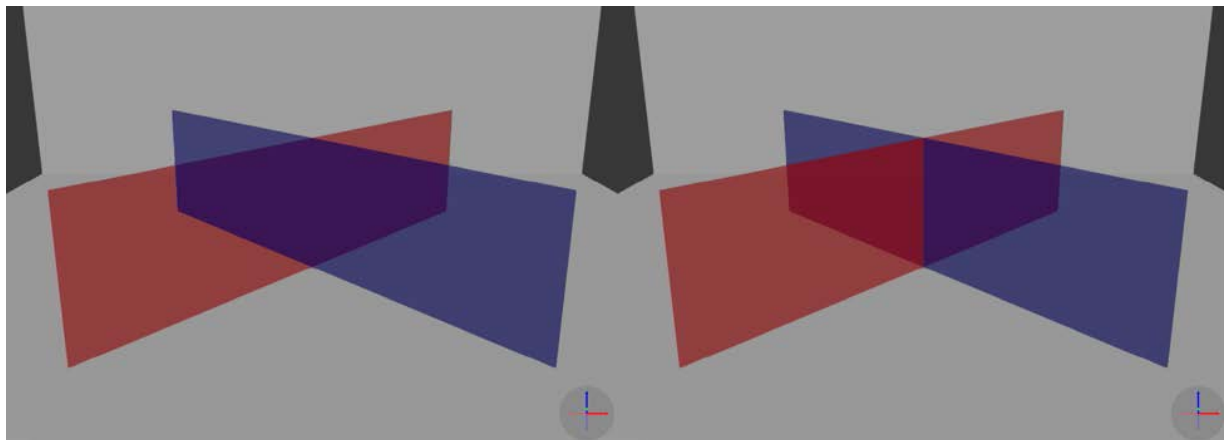
Reminder: Alpha Texturing is supported with PNG images containing alpha transparency built into the image. For more information about using Alpha Textures, please see <http://forums.cast-soft.com/index.php?threads/using-alpha-in-r38.662/>.



## Alpha Blending for Virtual View Cameras

Extending the Alpha Level support of the Alpha Beam Shadows feature to Alpha Blending for Cameras offers more realism when displaying translucent objects in the Virtual View.

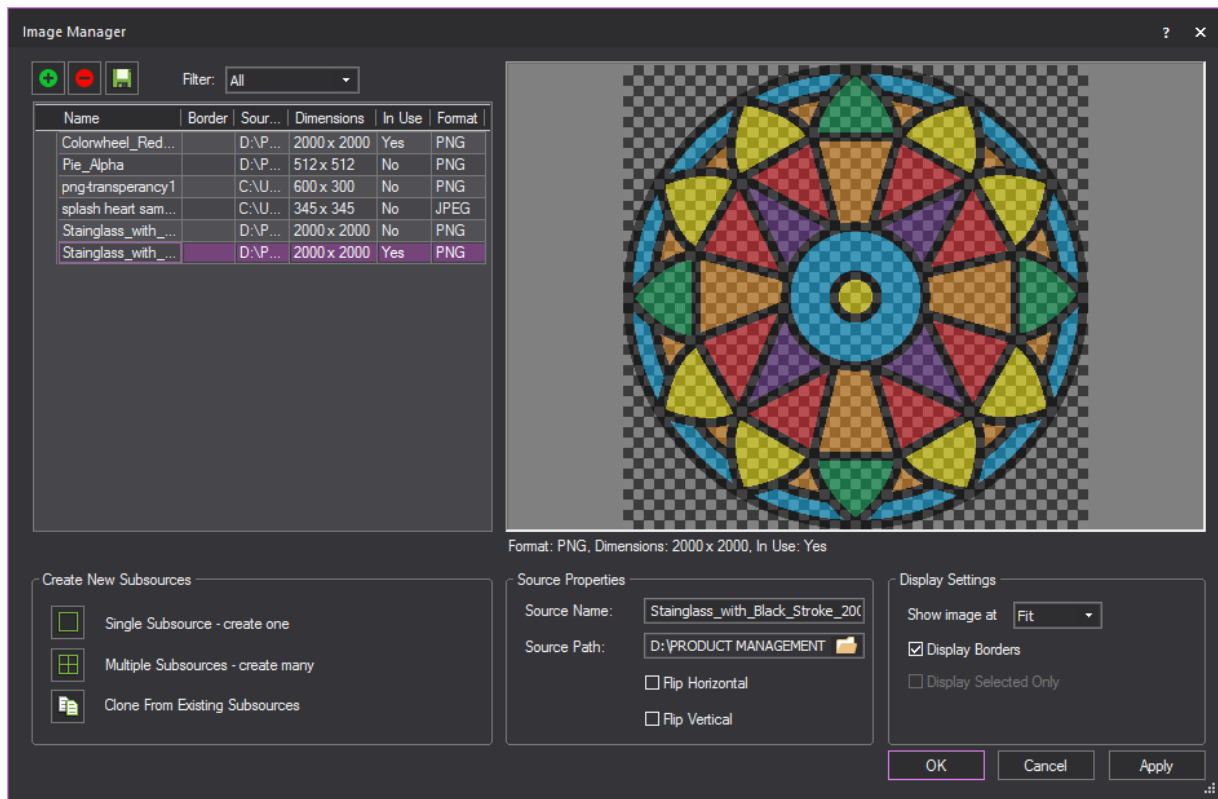
Previously, when displaying a scene which had overlapping translucent objects in our Virtual View, artifacts could appear, depending on the objects' display order, as one object would be completely displayed in front of the other one. Now, when there are scenes with intersecting translucent objects, if the Alpha Beam Surfaces option is enabled in the **Virtual View's View Options > Simulation** tab, then these visual artifacts are removed, as Vivien renders the scene with correct alpha blending for the Virtual View camera, as per the Camera's position.



**Figure 26 - Screenshot showing translucent Surfaces crossing each other, on the left displayed without Alpha blending, and on the right with new Alpha blending feature.**

## Image Manager Displays Alpha Levels in Image Preview

With the new features of Alpha Textures and Alpha Beam Shadows in Vivien 2017 and Vivien 2018 respectively, we have updated the preview in the Image Manager to display a grey checker pattern wherever there is alpha levels defined in the image.



**Figure 27 -Screenshot of the Image Manager showing a grey checker pattern to identify where there is alpha levels in the image.**

## Updated Logic for Maximum Image Resolution for Image Manager

The maximum limit for importing images to the Image Manager is no longer 2048x2048 but instead the total pixel size, which is equal to  $2048 \times 2048 = 4,194,304$  pixels.

This keeps the maximum file size the same, but now it is possible to import images which may be very wide and not tall, or vice versa, e.g. images of resolutions 8192x512 or 1024x4096 will now import into Vivien's Image Manager.

## Increased Rendering Resolution

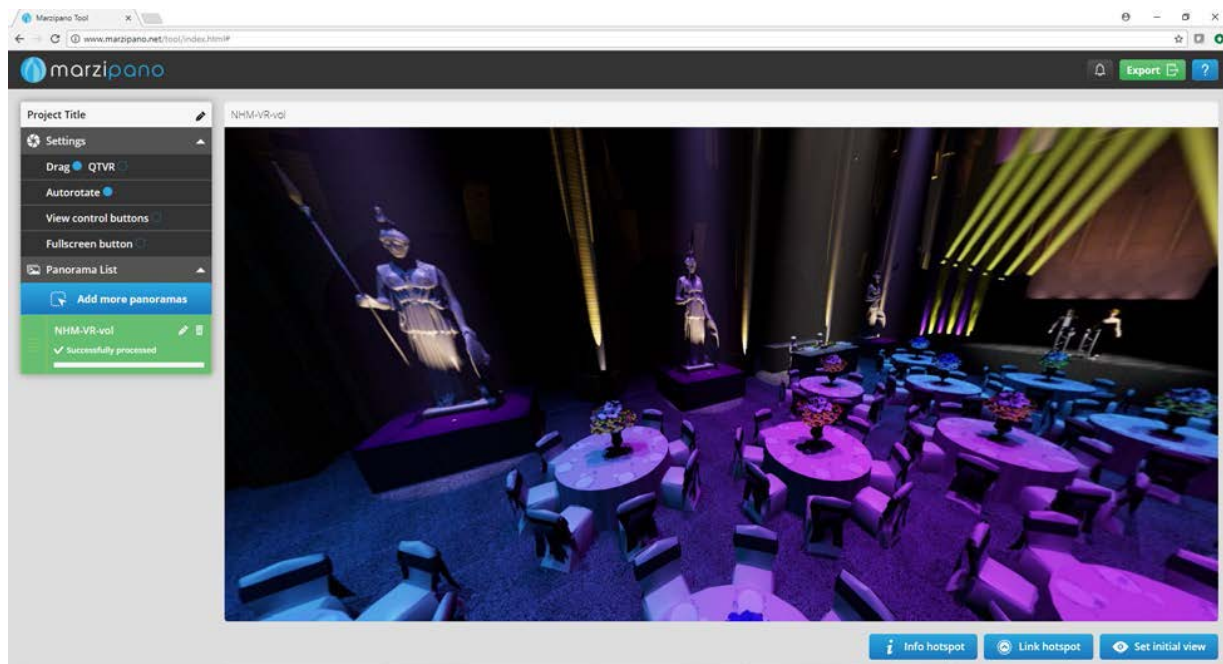
The maximum rendering resolution has been increased from 2048x2048 to 4096x4096 pixels.

## Virtual View Export as a Panoramic Image

The Virtual View Export now has a new **Panorama** option when exporting the Shaded View as an image. When selected, a Panoramic image can be exported as a **Spherical image** (full 360 degrees camera including top and bottom), or a **Cylindrical image** (only sides, up to 360 degrees).

The exported Panorama image includes metadata that will be recognized by other applications and browsers, so it can be viewed as a 360 panoramic image in some Web Browsers with add-ons, or with some VR Headsets using the correct application that can view a panoramic image.

Note: The Panoramic Image Export is limited to 4096 x 2048. However, to offer a better quality Virtual View Export for the **Panorama** option, if Vivien detects sufficient Video Memory to support a larger panorama image export, a higher resolution of 8192 x 4096 pixels will be listed in the dropdown.



**Figure 28 - Screenshot of the same Panorama image displayed in the Marzipano Tool in Google Chrome web browser.**

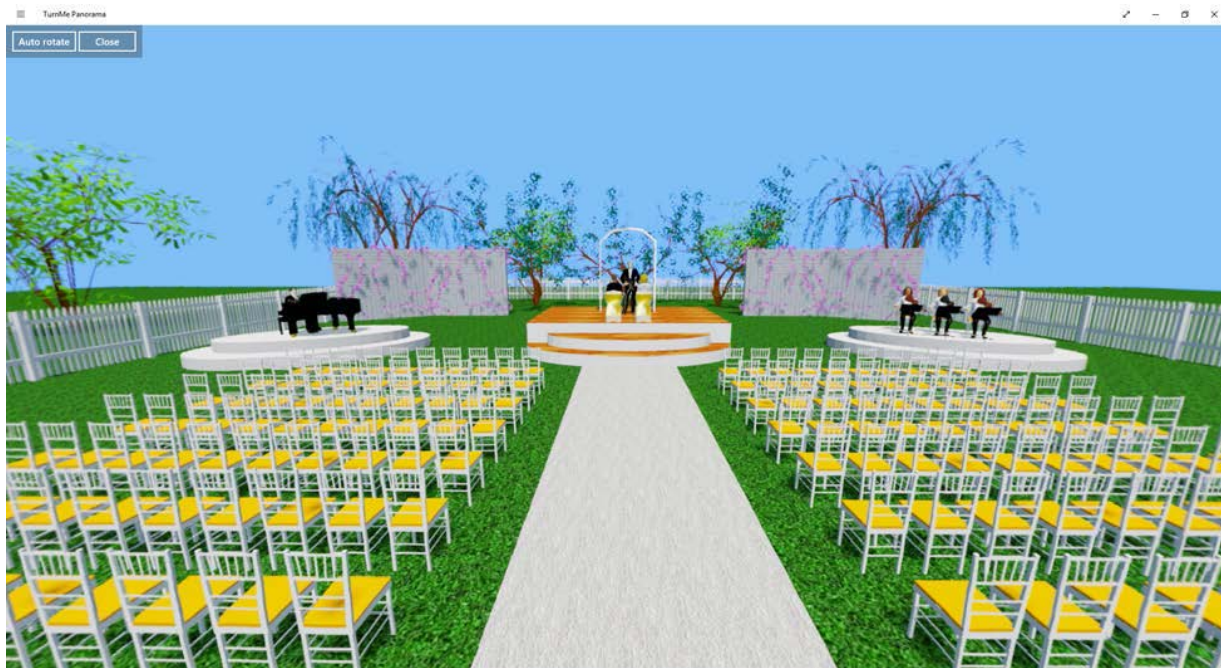


Figure 29 - Screenshot of the same Panorama image displayed in the TurnMe Panorama application.

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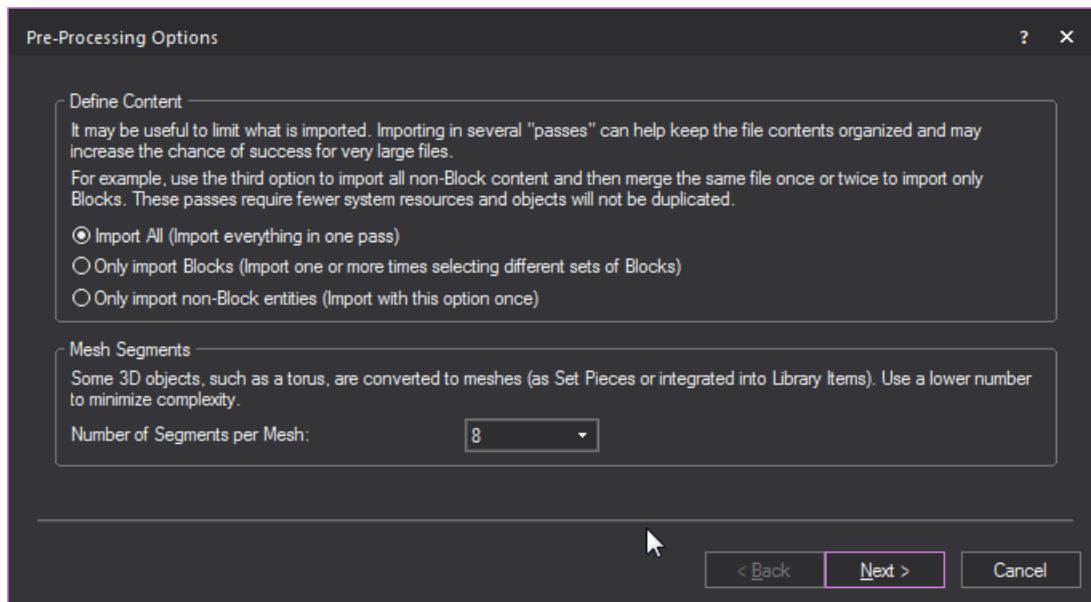
## AutoCAD Importing Improvements

For Vivien 2018, we have dedicated a lot of investigation time and effort to making improvements to importing DWG/DXF files. Some of the enhancements are more significant than others, but overall, the sum of all AutoCAD improvements should resolve many issues experienced when importing DWG/DXF files.

- **Memory Consumption**  
As discussed, we have investigated numerous DWG files, and have identified a few areas of the file import process that could be optimized. As a result, memory requirements during the importing of DWG files is much lower than before, and this should result in better-performing files (and less crashes due to insufficient memory).
- **Text and MText within a block are now imported as separate Text Labels in Vivien**  
Previously, Text and MText within a block were ignored.
- **Attribute text is replaced correctly**  
Previously, Attributes needed to be stripped out of DWG files being imported, because only their variables, not their values, could be imported. This is no longer necessary, as

Attributes' values are now converted to Vivien Text Labels; in other words, the text that appears when the DWG file is opened in AutoCAD will appear in Vivien once the import is complete.

- Special logic relating to Layer 0 in nested blocks imported as Library Items is now respected in Vivien  
This relates to ignoring some objects within a block whose visibility in AutoCAD is controlled by Frozen or Off layers. For some blocks, this greatly improves accuracy of what geometry is visible in AutoCAD vs. what is included in the Library Item in Vivien.
- A new column has been added to the Layer step in the wizard, showing the state of the layer in the DXF/DWG file  
Frozen layers are deselected for import by default. Off layers are selected but when imported will be set to Not Visible in Vivien. Note: Vivien Library Items and Layers work in a different way from AutoCAD blocks and layers. As a result, some objects will not be visible until their layers are turned on.
- A new "Pre-Processing Options" dialog appears during Importing and Merging for Block Conversions  
This dialog allows you to specify the items to import and the manner in which DXF/DWG Blocks are converted into Library Items.

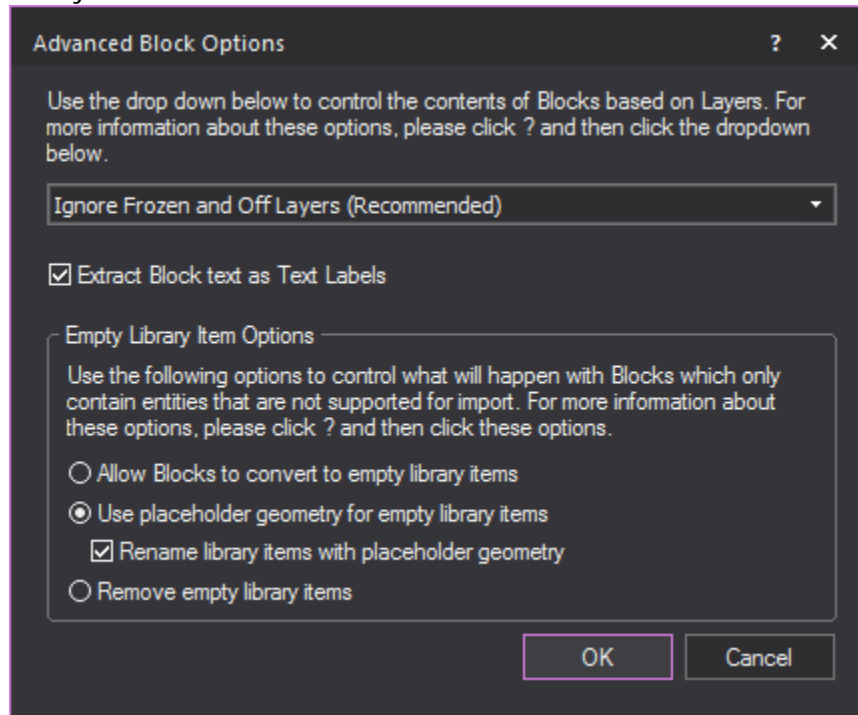


**Figure 30 - Screenshot of the new Pre-Processing Options dialog which appears when importing and merging DWG/DXF files with blocks.**

- **Number of Segments per Mesh:** This does not only affect Library Items, but also Set Pieces created as a result of importing some 3D objects that can't be converted directly to 3D Solids (Cone, Sphere, or Cylinder) in Vivien. For example, a frustum

cone (a cone with its peak cut off) is converted to a Set Piece. Previously, the number of segments was 40, which resulted in overly complex meshes and much higher memory consumption. 8 works very well for truss blocks but 20 may be more suitable for some 3D objects.

- A new "Advanced Block Options" dialog appears as an option to filter objects within a block during Importing, and Merging for Block Conversions. From the "Block" step wizard, this dialog allows you to filter objects within the Blocks based on their layer.



**Figure 28 - Screenshot of the new Advanced Block Options dialog which appears from the "Block" step wizard.**

- **Ignore Layers:** Previously, all objects within a block were integrated into the Library Item in Vivien, which could increase the complexity and also cause the Library Item to have a lot of geometry that would be hidden in AutoCAD. Objects on Frozen layers are never visible and they can now be skipped. With some justifiable exceptions, objects on layers that are not currently visible (but are also not frozen) can also be excluded and not integrated into the Library Item. This way, the geometry of the Library Item will closely match what is seen in AutoCAD while also reducing Library Item complexity (resulting in improved performance, and less risk of memory-related crashes).
- **Extract block text as Text Labels:** Select this option to convert text blocks into text labels.

- **Remove empty library items:** Selecting this option will exclude all the empty library items from the library.
- Pre-processing functionality added to find and fix errors and inconsistencies: some files that previously could not import at all will now import as expected. Every file being imported is analyzed and any errors are fixed automatically, without any interaction from the user.
- Improved accuracy for position and orientation of some cylinders, cones, spheres, and risers
- All Paperspace blocks should now be ignored by Vivien under all circumstances. As such, you no longer need to remove Paperspace layouts from the DWG file before importing it.
- Planar surfaces, helixes, and revolved surfaces are now imported rather than being ignored
- M-Leader custom arrowhead sizes imported.
- The Import Summary contains a few extra details about the complexity of Library Item meshes: Additionally, an ImportSummary.log file is created in "Documents\Vivien Files" that keeps track of the summary details. These can be used to compare imports of the same file with different settings.

A new version of the CAD importing guide is available, which, in addition to multiple importing tips discusses these updates in more detail. To access this updated guide, please visit: <http://cast-soft.com/cad-importing-guide>

## Library Additions in Vivien 2018

### Total Library Additions

Mannequins with Musical Instruments - Standing	10
Mannequins with Musical Instruments - Sitting	20
Mannequins with Musical Instruments - Sitting on Chairs	20
Mannequins with Musical Instruments - At pianos	7
Modular Backdrops	8
<b>TOTAL</b>	<b>65</b>

The following additions were made to the library in the Vivien 2018:

Path	Name
Mannequins with Musical Instruments	
Standing	Person with Alto Saxophone
	Person with Clarinet
	Person with Flute
	Person with Piccolo
	Person with Soprano Saxophone
	Person with Tenor Saxophone
	Person with Big Bass Drum
	Person with Timpani
	Person with Vibraphone



Path	Name
	Person with Xylophone
Sitting	Person with Alto Saxophone Sitting
	Person with Baritone Saxophone Sitting
	Person with Bass Clarinet Sitting
	Person with Bassoon Sitting
	Person with Cello Sitting
	Person with Clarinet Sitting
	Person with Double Bass Sitting
	Person with Double Bassoon Sitting
	Person with Flute Sitting
	Person with Oboe Sitting
	Person with Piccolo Sitting
	Person with Soprano Saxophone Sitting
	Person with Tenor Saxophone Sitting
	Person with Viola Sitting
	Person with Violin Sitting
	Person with Tuba Sitting
	Person with Trombone Sitting
	Person with Bugle Sitting
Person with Concert Harp Sitting	
Person with French Horn Sitting	
Sitting on Chairs	Person with Alto Saxophone Sitting on Chair
	Person with Baritone Saxophone Sitting on Chair

Path	Name
	Person with Bass Clarinet Sitting on Chair
	Person with Bassoon Sitting on Chair
	Person with Cello Sitting on Chair
	Person with Clarinet Sitting on Chair
	Person with Double Bass Sitting on Chair
	Person with Double Bassoon Sitting on Chair
	Person with Flute Sitting on Chair
	Person with Oboe Sitting on Chair
	Person with Piccolo Sitting on Chair
	Person with Soprano Saxophone Sitting on Chair
	Person with Tenor Saxophone Sitting on Chair
	Person with Viola Sitting on Chair
	Person with Violin Sitting on Chair
	Person with Tuba Sitting on Chair
	Person with Trombone Sitting on Chair
	Person with Bugle Sitting on Chair
	Person with Concert Harp Sitting on Chair
	Person with French Horn Sitting on Chair
At Pianos	Person at Baby Grand Piano
	Person at Baby Grand Piano Half Stick
	Person at Baby Grand Piano Closed
	Person at Concert Grand Piano

Path	Name
	Person at Concert Grand Piano Half Stick
	Person at Concert Grand Piano Closed
	Person at Upright Piano 2
Manufacturer > Modular Backdrops	Geo Wall (3 rotated positions)
	Honey Wall
	Ice Wall
	Infinity Wall
	Lux Wall
	Ripple Wall
	Stealth Wall (Single panel)
	Stealth Wall (4x4 assembled panels)

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## Fixes - Vivien 2018

The following issues were resolved in Vivien 2018:

- Bug description:** The Library Browser buttons do not work when the Library Browser is opened from the Welcome Screen.

**Fix:** This issue has been resolved. The Back, Forward, Up, Home and Item Properties buttons are now enabled when required.
- Bug description:** CAD Items in the Layouts tab is showing Hatch Styles and Dimensions, even when these objects have been disabled in Document Options and therefore should not appear.

**Fix:** This is now fixed. The CAD Items in Layouts are now respecting the options as specified in Document Options.
- Bug description:** Unchecking the "Show Dimensions" checkbox in Document Options > Wireframe Details only hides Linear Dimensions; other Dimensions are still displayed.

**Fix:** When the "Show Dimensions" Document Option was unchecked, only the Linear Dimension object was hidden, leaving Radial, Arc, Angle Dimensions and Linear Scales to be displayed. This is now fixed.
- Bug description:** Exporting a Vivien file as 2D DWG/DXF export should export Text as Text objects in AutoCAD instead of Line segments of a 2D text font.

**Fix:** This is now fixed. Vivien will export Text Objects as AutoCAD Text objects in 2D exports, as it does in 3D exports.
- Bug description:** Sort indicators in the Layer Database headers are invisible.

**Fix:** This is now fixed. The ^ or v symbols that represent sort order are now always displayed.
- Bug description:** 3D DWG Export does not export text from Dimensions or Camera Target object correctly, and sometimes the text is not exported at all.

**Fix:** These issues are now resolved. Exported text is displayed and with the correct font properties.
- Bug description:** When drawing a Freehand Pipe, using the Command Line to define the length uses the position of the cursor instead.

**Fix:** This issue is now fixed. Now, if the user defines a length for the Pipe in the Command Line, this value will be the length of the new Pipe inserted into the drawing.
- Bug description:** Revision History should be reset when a .VVT file is saved as .VVN file.

**Fix:** This is now fixed. Revision history and File Date are reset now when a .VVN file is saved from a .VVT file.

9. **Bug description:** Importing an old .3DS file may result in an invalid material preventing the .VVN file to be loaded after it is saved.  
**Fix:** Due to the older .3DS file's encoding of the text, importing the file with material was not handled correctly. This has been fixed.
10. **Bug description:** Sometimes a long delay is experienced when cancelling a Batch Print job in Reports.  
**Fix:** When a Batch print job was started and cancelled in Reports, a long delay would be experienced before the GUI was responsive. This is now fixed.
11. **Bug description:** Merging a DWG/DXF file that contains text objects inside a block may cause Vivien to crash.  
**Fix:** This issue has been resolved. Text is no longer extracted from blocks if it would be placed on a layer that doesn't exist.
12. **Bug description:** When a User Origin is defined, CAD objects with coordinates (e.g. Camera Target) would always display their coordinates relative to the Document Origin.  
**Fix:** These objects will now respect whichever origin is used in the document.
13. **Bug description:** When moving an object using a Relative Move (with distance entered from the Command Line) and Ortho is enabled, the move does not respect Ortho.  
**Fix:** This issue is now fixed. The object now moves in the active orthogonal directions only.
14. **Bug description:** Linear Scales sometimes do not place tick marks in correct location.  
**Fix:** The results varied depending on Scale length and parameters. This issue is now resolved.
15. **Bug description:** Arc center points are included for extents calculations making Fit operations inaccurate.  
**Fix:** This bug is now resolved. Only the visible sections of an arc are included in the fit operation.
16. **Bug description:** Font Controls in Object Properties do not handle indeterminate states.  
**Fix:** When two or more CAD objects displaying text (Text Label, Camera Target, Linear Scale) were selected with different font properties, font properties were not displaying indeterminate states. This is now fixed.
17. **Bug description:** After attempting to import a corrupted DWG file which fails, future attempts to open any other DWG file will fail until Vivien is restarted.  
**Fix:** This bug is fixed, and a valid AutoCAD file will open after a failed import attempt.
18. **Bug description:** When a DWG file is imported which contains a high number of text objects (over ten thousand), it may lead to a crash.  
**Fix:** This issue has been fixed.

19. **Bug description:** In Lighting wireframes, View Options > Draw Options are set to their own options (i.e. not following Document Options), any changes to draw order are ignored.  
**Fix:** This has been fixed. Draw order is respected.
20. **Bug description:** Sometimes when Freezing columns in Layer Groups, the horizontal scroll is not displayed anymore.  
**Fix:** This issue has been fixed.
21. **Bug description:** Background Rendering Manager cannot save to PNG or TGA file formats.  
**Fix:** This issue has been fixed.
22. **Bug description:** Mesh Consolidation text updated in dialogs.  
**Fix:** The text in the dialog was not very descriptive. These dialogs now include more information.
23. **Bug description:** Vivien may crash if you abort drawing a Camera Path through the Visual Camera Path Builder.  
**Fix:** This issue is now fixed.
24. **Bug description:** Vivien may crash if modifying or deleting a Floorplan from an Isometric view.  
**Fix:** This issue is now fixed.
25. **Bug description:** When running on Windows 7, Vivien may crash after cloning a Scene in your file, and then setting this Scene as current.  
**Fix:** This issue is now fixed.

## Known Issues

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### 1. XLSX files created from Spreadsheets or Event Resources tab will not open in OpenOffice

Files with the extension .xlsx that are created in the Spreadsheets or Event Resources tabs of Vivien will not open in OpenOffice. However, these files will open with Microsoft Excel 2007.

### 2. Transparent surfaces that touch non-transparent objects are not transparent in the rendered image

To ensure that transparent surfaces touching non-transparent objects are completely invisible in renderings requires a slight workaround. When placing the transparent surface or object in your drawing, ensure that a minuscule space exists between it and any non-transparent objects in your drawing (this space can be as small as you like). For example, if you are placing a transparent surface

on a floor, nudge the surface just above the floor. When you render the image, the surface will be invisible.

**3. In Vivien files which contain more than one Seating Area, increasing any of the Seating Areas may result in non-sequential numbering of the new items added**

The new table/chairs added will be assigned unique numbers, but in some cases the numbers will not be sequential.

**Workaround:** If this occurs, use the Quick Numbering Tool in the Guest Management tab to renumber the tables/chairs as you wish.

**4. Bring to Front and Send to Back commands in Drawing Wireframe/Quad tabs and in Layouts tab cannot be undone**

The Undo command will undo the action previous to any Bring to Front/Send to Back commands. Reversing the operation must be done manually and it may take several steps to return objects to their original draw order.

**5. 'Windows' created with the Boolean > Subtract tool may disappear when the file is re-opened.**

Sometimes, if 'windows' are cut out from a 'wall' surface when both the wall surface and the surfaces that will be used for the cutouts, After saving and closing the file, re-opening it causes the windows to be filled in again in the Virtual View. In Drawing Wireframe views, the cutouts are still there.

**6. Performing 15-20 Boolean operations in a File may lead to a crash on the next Boolean operation**

There is a limit for how many Boolean operations may be performed in a file, but this limit depends on the geometric complexity of the objects within the file, and is therefore unpredictable. If performing repeated Boolean operations on the same objects, it is recommended that you save and back up your work often or even after every successfully completed operation.

**7. Linear Scale objects do not export in 3D DWG/DXF exported files**

Although Linear Scale objects will export to a 2D DWG/DXF exported file, they currently do not export to a 3D DWG/DXF exported file.

**8. You cannot perform a second Merge operation on a merged item that has been mirrored**

After mirroring an object that was originally created through a merge operation, you cannot reliably perform another merge procedure on this object.

**Workaround:** It is recommended that you perform all Merge operations on these objects before you mirror them.

**9. After saving your Vivien file directly to a Network Attached Storage (NAS) device or any other remote drive/location, including (potentially) USB drives, you may have trouble opening the file**

**Workaround:** Work on files that are kept on your local hard drive. Before you begin working on the Vivien file, copy it to your local drive and open it from there; once you are finished working on it, save the file (on your local hard drive) and then move it back to your NAS device.

**10. Undo/Redo is not supported for Camera Path nodes set to User Defined.**

**11. Users running Vivien on computers with integrated video cards have reported quality- and performance-related issues in the Vivien Virtual View**

This problem is related to very limited hardware support for features required by Vivien's Virtual View. Please ensure that you have the latest graphics drivers for your computer. If issues are still experienced in Virtual View, please turn off any unnecessary visualization features. For advice on this, please refer to the following *wysiwyg* article, which offers valuable insights to the Virtual View settings: <http://cast-soft.com/wysiwyg/improving-performance-in-shaded-view/> . Please note that although Vivien will run on a computer with an integrated graphics card, this is not recommended for larger files, and especially not for complex visualization projects -- please use a computer with dedicated/discreet video card instead. For more information about updating your video card drivers, we recommend that you refer to the following thread on our Forum: <http://forums.cast-soft.com/index.php?threads/general-information-on-fixing-shaded-view-problems-crashes.302/>.

**12. Vivien cannot print to a PDF file if the file's name or path contains Unicode characters that do not exist in the current system language code page.**

For example, if your system is using English (United States), you cannot specify a path with Chinese characters.

**Workaround:** One workaround is to name the file using only characters in your system language from Vivien, and then rename the file afterwards from Windows. Alternatively, if you set the Windows OS language settings to a language which uses the same characters used in the file name or path, then the image can be exported successfully.

**13. Vivien cannot export the Virtual View to a JPEG image if the file's name or path contains Unicode characters that do not exist in the current system language code page.**

**Workaround:** One workaround is to save the JPEG in a different image format, (e.g. BMP, PNG, etc.), and it will save successfully. Alternatively, save the JPEG image file with a name and path only containing viable Unicode characters from Vivien, and then rename the file afterwards from Windows.

**14. The glow feature for Screens may display a white glow when running on some systems using integrated graphics.**

Integrated graphics cards do not always support all Enhanced Visualization or Deferred Shading features. As a result, although the glow is visible, the color of the glow may be displayed as white, rather than the color of the content on the Screen.

**15. When exporting the Virtual View using "Export to Image", video card settings are not ignored in the exported image.**

**Workaround:** This does not happen if the Virtual View is saved to the Image tab first, and then exported from the Images tab. Another option is to use the PrintScreen feature to capture a screenshot and then paste the image into an Image Editing application.

**16. When running Vivien in the VMware Fusion virtual machine environment (which is not a supported platform), textures are not applied or displayed correctly on surfaces in the Virtual Views.**



**17. When running Vivien in the VMware Fusion virtual machine environment (which is not a supported platform), "Save to Image view" and "Export to image" options on right click menu may crash Vivien.**

**18. When running Vivien in the Parallels or VMware Fusion virtual machine environment (which is not a supported platform), enabling the "Soft Shadow" option in the Virtual Views may crash Vivien.**

*(Please note that VMWare Fusion is no longer a supported operating environment, as of Vivien 2013.)*

**20. For imported hatch patterns with dots, printing may not provide the expected results.**

When printing a hatched object that uses a hatch pattern with dots, the dots may appear very small and faint or may not appear at all. Vivien has several hatch patterns with simulated dots that use short line segments instead. This is only a problem if a pattern file is imported.

**21. Some PDF Files (particularly Multi-Layer PDF files) may fail to import as floorplans.**

**Workaround:** A few workarounds to this problem are available.

- 1. Ask for another version of the PDF file (or re-create it), without Layers.
- 2. Use Adobe Acrobat Pro to flatten/merge the layers. (As stated on the Adobe Help page above, this requires the Pro version of Acrobat, which is not free.)
- 3. If GhostScript is installed on the system, Vivien can attempt to use it. Installing the latest version of 32-bit GhostScript may help resolve this issue.

**22. Occasionally when opening a dialog in Vivien 2018, the window's border is displayed but the contents of the window are not shown.**

This issue happens randomly. If you experience this problem, you can use the ESC key to close the dialog or click in the top right corner of the dialog where the X button would be. Usually if you try to reopen the same dialog again, all the contents will be displayed the next time it is opened.

**23. When switching between tabs or between Visual Themes, Vivien mouse clicks may affect the window shown in Vivien.**

During these slower operations, Vivien may become temporarily inactive. Avoid clicking the mouse until the switch is complete and Vivien will stay in the foreground.

**24. Due to differences in how applications work with text, some issues exist with exporting text labels to DWG.**

Exporting text labels with multi-line text will result in a text object with one line of text in the DWG/DXF file. Text label borders and background fill are not exported. The Align to View property is ignored. Text will appear slightly larger and may be in a slightly different position from how it appears in Vivien, but it is much more accurate than in previous releases.

**25. Depending on DPI settings, Layouts may not display or print Worksheet and Report objects at the specified scale.**

**26. Sometimes when you render a file which has objects imported from SketchUp, the textures do not appear in the rendering.**

This is a random bug which happens from time to time. It is possible to determine if the textures will be rendered from the small preview before you start the render job. If you do not see any textures appearing in the small preview, close the Render Wizard window, and reposition your camera and start the Render Wizard again. In most cases, the next time the textures will appear in the rendering (just verify first in the last step of the Render Wizard before starting the render job).

**27. AMD graphics cards do not report correct amount of video memory in Virtual View Statistics.**

The Virtual View's View Statistics incorrectly reports 3072MB of video memory for AMD graphics cards. Since the memory query used is not supported on AMD cards, this information will not be displayed for AMD graphics cards, but will be kept for NVIDIA graphics cards.

## Contacting Technical Support

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Please read the online documentation and visit the [www.cast-soft.com](http://www.cast-soft.com) Web site before contacting Technical Support. You can contact Technical Support at the following location.

CAST Software Technical Support  
35 Ripley Avenue, Unit 1  
Toronto, ON Canada M6S 3P2

Phone: +1.877.989.2298

Fax: +1.416.597.9594

E-mail: [techsupport@cast-soft.com](mailto:techsupport@cast-soft.com)

Web site: [www.cast-soft.com](http://www.cast-soft.com)

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