The Design Explorer
The Ashlar-Vellum User Newsletter

New Image Handling Options in v9 3D Modeling

Several new options for handling 2D raster images, such as jpg, png, bmp, and tiff files, are being added to our 3D modeling software for v9.

**Background Image Aspect Ratio**

A Co Xe image designated as the background for a file using the user preferences can optionally retain their aspect ratio as the window size is changed.

**Transparency**

A Co Xe image can be transparent independent of its alpha channel.

**Independent Corner Adjustment**

A Co Xe image can be independent of its alpha channel. Images do not have to remain rectilinear but can be changed to any simple quadrilateral (four-sided, non-intersecting) shape.

**Used as Infinite Plane**

A Co Xe image can be used as a plane and used in that way.

**Fit to Profile**

A Co Xe image can be fit to a simple quadrilateral profile. If the profile changes, the image updates.

**Link to Profile**

A Co Xe image can be linked to a profile including a parametric- or equation-driven sketch. If the profile changes, the image updates.
Accessory Focus

Vellum:materials
This library of surfaces and finishes reduces the amount of time it takes to prepare a model for rendering. These materials are great for nearly anything designed in Cobalt™, Xenon™ or Argon™, including furniture, home furnishings, consumer products, industrial products, art objects, architectural forms, automotive, marine, or anything else you can conceive.

Have greater control to create better renderings and more effective client presentations. The collection includes natural and man-made materials in multiple finishes. Choose for example:

And the list goes on...

- Floor Tile
- Glass Block
- Heat Resistant Reflect
- Glass
- Rippling Water
- Machined Aluminum
- Copper
- Chrome
- Blue Glass
- Titanium
- Brushed Nickel
- Carbon Fibre
- Corroded Metal
- Wood Cherry
- Wood Oak
- Flooring Paving
- Pressed Plastic
- Stone Asphalt
- Bone China
- Terracotta
- Worn Leather
- Burlap
- Plastic
- Linoleum

These are but 24 of the 360 different materials that can be applied to a product design.

Vellum:materials
CD US $100.00. e-only download US $92.81
Site license with CD US $200.00, e-only US $192.81.
Some Anticipated Features in Graphite™ v9

The following features are on the drawing board, so to speak, for the next major version of Graphite. This list is by no means exhaustive but will give you a flavor of what’s anticipated. Each is at a different stage of development by our programmers, product management and quality assurance people. We’ll be giving you more information on these features in the months to come.

Path Duplicate
In addition to the linear and polar duplicate features currently in Graphite, the path duplicate command will replicate objects along a path that is defined by any combination of arcs, lines or splines.

Limitless Construction Lines and Grids
Previously, construction lines and grids were always a percentage larger than the display boundaries at the time they were created. Now they can be of infinite size.

Redrawing interrupted by Zooming or Panning
System response is greatly improved during zooming and panning by the implantation of interruptible updates to display redraws.

Drag & Drop Operations in Layers, Sheets and Models Dialogs
The order of layers, sheets and models listed in the dialog boxes can be more easily rearranged by dragging one to a new position and dropping it into place.

Some Anticipated Features in Cobalt™, Xenon™ & Argon™ v9

The following features are under discussion for the next major version of Cobalt, Xenon and Argon. This is not a complete list but just some of the things we expect to include. As with Graphite, each is at a different stage of development by our programmers, product management and quality assurance team. More information on each will be coming in the months ahead.

Drag & Drop Operations in Layers
Layer order will be more easily rearranged by dragging a layer to a new position and dropping it into place.

Accelerated Hidden and Hidden with Dimmed Display Modes
New options using Open GL shading operations display objects with hidden lines up to 1000 times faster than the existing methods using the ACIS engine. Both methods will be available for those who prefer the old way.

SketchUp Import and Export
File import and export support for Google SketchUp’s SKP files will be built-in without the current limitations of using DXF.

Exploded Views in Model-to-Sheet for Assemblies
In Cobalt and Xenon only, this new feature will provide automatic exploded views when doing model-to-sheet that can then be modified for better aesthetics or clarity.
Innovate to Differentiate

“If you want something to look different, you often have to do something different in the production process,” says designer Fred Puksta, product designer for Crown Point Cabinetry, a high-end, custom cabinetmaking company that sells direct, globally via the internet.

For almost 20 years, Fred has been using Ashlar-Vellum CAD and 3D modeling software to create some of the most innovative furniture and cabinet designs on the market. While most cabinet companies change aesthetic styles by simply switching out doors, drawer fronts and hardware, Fred approached the development of several new lines by addressing the foundational element of period-styled cabinetry, the face frame.

While typical face frames from most manufactures are rectangular in cross-section with a flat face, Fred and Crown Point Cabinetry introduced a new, patented face frame with a cross section in the shape of a “C” that Fred calls “Channel Stock.” The Channel Stock became the new foundational element for several new lines, including their Prairie, Neoclassical and Classical Metropolitan styles.

A Cobalt™ precision 3D modeling user, Fred tells us: “Ashlar-Vellum Cobalt was instrumental in every phase of the development process of our Channel Stock. From concept, through design and onto detailed shop drawings, Cobalt’s modeling and rendering capabilities were paramount in selling this new product initiative and translating it into our client’s Prairie-style kitchen.”

Once the 3D modeled components were created during the development phase, Fred tells us it was a simple matter using Cobalt to produce the drawings for the design patent which captures the aesthetic essence of each element.

“The Sheet-to-View tool is a fantastic tool. There’s no two ways about it. A couple clicks and I have multiple views, orthographic views of whatever element I’ve selected. And then you can make other views from those views like auxiliary views, or additional orthographic views by just basically clicking on them and dragging them left or right in different directions. They’re very easy to come out of Cobalt.”

In addition, drawings were integrated into the manufacturing documentation, vendor tooling drawings, and sales and marketing tools.

“Product differentiation,” says Fred, “is what sets Crown Point Cabinetry apart from the competition. Knowing that people often want what their friends don’t have, we continue to make a new, attractive product that often requires us to adapt and learn new things.”

Fred used Cobalt CAD and 3D modeling software to design the Channel Stock face frame and generate the patent drawings that captured its aesthetics.

Above: Channel Stock detail. Below: The Prairie (top) and Neoclassical kitchen cabinet styles offered by Crown Point Cabinetry using Channel Stock.

Background/Contact
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