

The Design Explorer

The Ashlar-Vellum User Newsletter

Fourth Quarter, 2015

Graphite[™] v10 in Candidate Release

Because of all the extra feedback we've received on the first release candidate of Graphite v10, our team has a number of additional things that need to be fixed before we go to full release. With both western and orthodox Christmas holidays in play, the next release candidate of Graphite is anticipated in mid January.

In addition to support for the latest operating systems on both Mac and Windows, Graphite v10 adds the following enhancements

New Features & Functions

Draw Order Controlled by Layers or Arrange Menu:

In v10 the draw order of objects can be handled either by the Arrange menu or the Layer dialog box. Individual entities can be moved using Arrange to bring them forward or backward one step or to bring them to the front or back. Entire layers can also be brought forward or backward as desired by simply reordering the layers in the dialog.

Layer Visibility by Viewport:

Graphite v10 lets you control the visibility of layers for each viewport. This is particularly useful for AutoCAD compatibility.

Center Hot Points in Circles:

Hot points are available in circles, arcs and ellipses making it easy to directly grab their center points.

Drafting Assistant Snap to Work Plane:

Ashlar-Vellum's patented Drafting Assistant[®] is enhanced to include snap to work plane. This makes drawing in 2D easier, even when working with a 3D import.



Ungroup vs. Explode Tool:

In Graphite v10 use the Ungroup tool to ungroup deeply nested groups without ever worrying about breaking apart dimension entities. Use the Explode tool when dimensions need to be broken into entities.

DXF/DWF Scale Factor:

In Graphite v10 the scale factor can be set prior to importing a DXF/DWG file.

Greater Usability Enhancements

Enhanced Palette & Dialog Memory:

Now tool palettes and dialog box positions are remembered independently for every screen size used including single and dual screen configurations.

Expanded Open File Formats:

Double click or directly open other file formats such as DWG/DXF, PDF and EPS with Graphite v10. No longer do they have to be imported through the File menu inside the previously launched Graphite software.

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Improved Layer Dialog:

The Layer dialog box has better spacing for use with higher resolution screens.

Zoom All Border Area:

The Zoom All function is improved in Graphite v10 to set the border area of the drawing area. This prevents geometry from hiding under palettes at the edges of the screen.

Grid Color:

The grid color is user definable in Graphite v10. Now any color can be selected making it easier to see.

Font Report:

The new font report in v10 identifies missing fonts and allows temporary or permanent substitutions.

Import Export Enhancements

Improved DXF/DWG:

The import and export of DXF/DWG in v10 now supports up to AutoCAD 2016.

Enhanced PDF Import:

A number of general improvements are included in Graphite v10's PDF import capabilities.

More Raster Image Formats:

More than 20 new raster image formats can now be imported into Graphite v10 including PNG and TIFF.

Enhanced EPS Export:

The EPS export in Graphite v10 is improved to include dimensions.

From	To	Upon Release	Part #
Graphite v7	Graphite v10	US \$795.00	11101006
Graphite v8	Graphite v10	US \$495.00	11101007
Graphite v9	Graphite v10	US \$195.00	11101005

Collins, Karpenko & Bou to Kiev

Mike Collins and Vladimir Karpenko traveled to Kiev, Ukraine to work with new members of our team there training them on the packaging market and some of the technical aspects of using Rules and SteelRules software. Following the training they were joined by Robert Bou to work on in-depth Quality Assurance and further product testing.



Mike Collins, left, talks about why certain functions of Rules are important to the packaging and sales display industry with our technical teams in the Kiev office.

Welcome Steve van Wyk

Bou traveled on to South Africa to meet with Steve van Wyk just outside Johannesburg. As a professional engineer, Steve is a long time user of Ashlar-Vellum products. We will now be utilizing his expertise in a consultative sales capacity for both Ashlar-Vellum and AlphaCorr worldwide sales efforts. Steve has a wealth of experience in mechanical design, finite element analysis and product management. He is a patent holder and enjoys spending time with his wife and four boys.



Cobalt™, Xenon™ and Argon™ v9

The latest versions of Cobalt, Xenon and Argon are in beta with release candidate anticipated in mid January. The following enhancements are included:

Latest OS Support:

OS X 10.6, 10.7, 10.8, 10.9, 10.10 & 10.11.
Windows 7, 8.1 & 10.

Enhanced Import/Export:

DXF/DWG translation in v9 now supports up to AutoCAD 2016. We've added 2D PDF import and 3D PDF export, as well as an export for Kinetics (.sim).

Smart Walls:

Smart Walls are double lines that are automatically trimmed at the intersections when the walls are on the same layer. Thickness, height, angle and length are specified in the Status Line. Optional properties include hatch pattern, hatch color, trimming, single or double lines and wall orientation such as center line, inside or outside.

Smart Doors:

Doors are inserted into wall segments. When viewed from the top, the arc and width of the door appear. From all other views, the door appears as a 3D object. Options include single and double doors.

Smart Windows:

The Window tool is for adding windows to a wall segment. Like the doors, the windows appear appropriately in top vs. other three-dimensional views. Windows can have overlapping, tight or standard sills.

Improved Hatching:

Hatching options include calculation and display of perimeters and areas of any designated object. Hatching patterns can only be applied to a 2D object but can be used in any 3D plane.



Flattened Perspective View:

Facilitates 2D line art with perspective brought into a view for illustration purposes.

Surface from Two Contours:

A convenient way to loft a surface between two contours (an open set of 2D curves) where the starting and ending angles are assumed to be perpendicular to the plane curve.

Conic Surface from Sections and Guides:

A convenient way to designate conic surfaces which are common in aerospace and industrial design.

Background Image Aspect Ratio:

An 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:

An image can be transparent independent of its alpha channel.

Independent Corner Adjustment:

Images do not have to remain rectilinear but can be changed to any simple quadrilateral (four-sided, non-intersecting) shape.

Image Used as Infinite Plane:

Any 2D image can be designated and used as a plane.

Fit to Profile:

Draw a simple quadrilateral profile then fit an image to it.

Link to Profile:

Create a profile including a parametric- or equation-driven sketch and fit an image to it. If the profile changes, the image updates.

Cobalt, Xenon and Argon v9 Preview Edition

In a hurry to run our 3D modeling software on the latest operating systems? The Preview Edition of Cobalt, Xenon and Argon v9 updates v8 features to run on Windows 8.1 and 10 as well as OS X 10.10 and 10.11, plus adds 3D PDF export capabilities.



Cobalt, Xenon & Argon v9 Upgrade All pricing retail.

From	To	Until Release	Upon Release	Part #
Cobalt v6 (w/ Graphite v7)	Cobalt v9 & Graphite v10	US \$1,490.00	US \$1,690.00	15091002
	Cobalt v9 only	US \$ 795.00	US \$ 895.00	15091003
	Graphite v10 only	US \$ 695.00	US \$ 795.00	11101006
Cobalt v7 (w/ Graphite v7)	Cobalt v9 & Graphite v10	US \$1,290.00	US \$1,490.00	15091004
	Cobalt v9 only	US \$ 595.00	US \$ 695.00	15091005
	Graphite v10 only	US \$ 695.00	US \$ 795.00	11101006
Cobalt v8 (w/ Graphite v8)	Cobalt v9 & Graphite v10	US \$ 440.00	US \$ 690.00	15091006
	Cobalt v9 only	US \$ 145.00	US \$ 195.00	15091007
	Graphite v10 only	US \$ 295.00	US \$ 495.00	11101007
Cobalt v8 (Plus Graphite v9)	Cobalt v9 & Graphite v10	US \$ 290.00	US \$ 390.00	15091008
	Cobalt v9 only	US \$ 145.00	US \$ 195.00	15091009
	Graphite v10 only	US \$ 145.00	US \$ 195.00	11101005
Cobalt v8 (Plus Graphite v10)	Cobalt v9 only	US \$ 145.00	US \$ 195.00	15091010
Cobalt v8 Solo	Cobalt v9 only	US \$ 145.00	US \$ 195.00	15091011
Xenon v6 (w/ Graphite v7)	Xenon v9 & Graphite v10	US \$1,290.00	US \$1,490.00	14091002
	Xenon v9 only	US \$ 595.00	US \$ 695.00	14091003
	Graphite v10 only	US \$ 695.00	US \$ 795.00	11101006
Xenon v7 (w/ Graphite v7)	Xenon v9 & Graphite v10	US \$1,090.00	US \$1,290.00	14091004
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Argon v8	Argon v9	US \$ 145.00	US \$ 195.00	13091004

www.ashlar.com 3.0

Our website has had an extensive makeover to ensure compatibility with tablets and mobile phones. This helps boost Google rankings as well. Check out the new clean design that resizes to almost any width.



New KineticsTM Video



A [new sales video for Kinetics](#) motion simulation software is now available. This four minute video talks about the simulation capabilities in Kinetics and will be followed up by another that surveys its photo rendering and animation capabilities for making presentations.

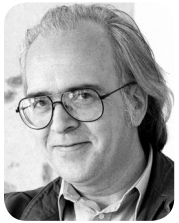
Holiday Greetings

We wish you all the best for this holiday season and through out the year ahead.

During this time, the Ashlar-Vellum administrative offices will be on reduced staff **December 21st** through **January 8th**. During this time, orders placed will be processed through our European offices. Requests for demos will be monitored and fulfilled. Technical support will be handled as usual through our website.



Not Your Daily Grind



Prior to finding Graphite CAD software, John Bicht of Versalab spent 15 years coping with AutoCAD's rigidity and MicroStation's counter-intuitiveness. "The problem was," said Bicht, "you had to figure out the position and dimensions of something before you were even sure you wanted it in the design." Frustrated, he gave up on CAD and went back to paper and pencil. "Programs like AutoCAD may suit draftspeople," comments Bicht, "but never designers."

In the late '90's Bicht discovered Ashlar-Vellum precision drafting software and immediately fell in love. He soon upgraded to Graphite, though he continued using only its 2D capabilities. "I can state absolutely that if not for Graphite I would still be using paper and pencil." Working in Graphite, Bicht created the M3 Espresso System.

"I quickly learned how to actually be more fluid in Graphite than I was on paper. I was able to make a complicated machine layout and derive detail drawings faster and easier than I could ever have done on a drawing board."

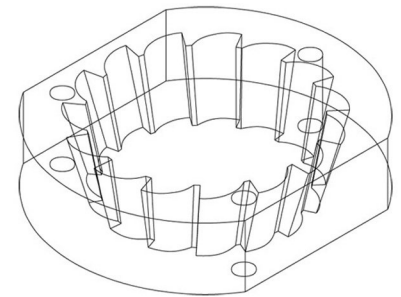
The initial M3 design utilized a set of commercially available metal burrs for grinding the coffee, known for producing superior flavor. Two sets of burrs had been used in the prototypes and now with sales pending, Versalab placed an order for 15 additional sets from the Italian manufacturer. Unfortunately, the Italians had stopped making the burrs. Versalab had fully assembled grinders with no mills. After much negotiation, the Italians offered to make 200 sets of burrs, prepaid, at \$100 per set, scheduled for one-month delivery.

Faced with a \$20,000 problem that Bicht knew would never be delivered in 30 days, he sat down with Graphite CAD software, and having never used Graphite's 3D capabilities, in an hour and a half figured out how to create the complex 3D drawings of the conical-shaped burrs for this first-class coffee grinder. The 3D drawings were quickly converted to IGES files and sent to a water-jet tooling company who manufactured the mills in a fraction of the time and cost.

For the next version of the M3, Bicht is moving from Graphite to Xenon. He will start generating interest among coffee connoisseurs using photo-realistic renderings prior to ever building a physical prototype. Says Bicht, "Ashlar-Vellum allows us to make the M3 Espresso System the most amazing espresso equipment anywhere in the world."



The M3 Grinder's revolutionary design eliminates all residual grounds so there are no oxidized remains from previous grindings.



Bicht created the complex 3D drawings for the M3's conical-shaped burrs in about an hour and a half, never having used Graphite's 3D capabilities before.

Background/Contact

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