The Design Explorer

The Ashlar-Vellum User Newsletter

Fourth Quarter, 2013

Release of Graphite v9

Graphite™ v9

Graphite v9 was released December 16th with an even more approachable user interface.

The new features and enhancements to v9 include the following list. For details on each listing click here and go the learn more section.

Greater Usability Enhancements

- Enlarged Text for User Interface Items
- Updated & Enlarged Icons
- Tool Tips
- Help Tool Hyperlink
- Visual Assistance including:
  - Cursor Options
  - Scaled Line Weights
  - Menu Fonts

New Features & Functions

- General Function Tool Palette
- New Construction Line Tool
- Infinite Grid and Construction Lines
- Copy along Path Tool
- Stretch Tool
- Visual Colour Selection Palettes
- Drag & Drop Re-ordering in Layers, Sheets, and Models Dialogs

Import Export Enhancements

- Latest DXF/DWG Support
- 2D PDF IMPORT
- PDF Large Size Export
- Drawing Size Window Supports PDF Page Size
- EPS Export Enhancements

Increased Redraw Speed

- Redrawing Interrupt
- Grid Display

International Enhancements

- Unicode Core Base
- Support for 11 Languages
- Support for Hebrew Typing (Windows only)
- Support for Files from Pirated Versions of Graphite and Vellum

Because this release has a shorter list of new features, it also has a lower upgrade price than many of those we've offered previously.

Early Adopter Price Dec 14-31, 2013

Upgrade Graphite v8 to v9 US **$195**

Upgrade Graphite v7 to v9 US **$595**

Retail Price Jan 1, 2014 on

Upgrade Graphite v8 to v9 US **$245**

Upgrade Graphite v7 to v9 US **$695**

Free v8 to v9 Upgrade

Anyone who purchased Graphite v8 on or after October 1, 2013 will receive Graphite v9 for free.

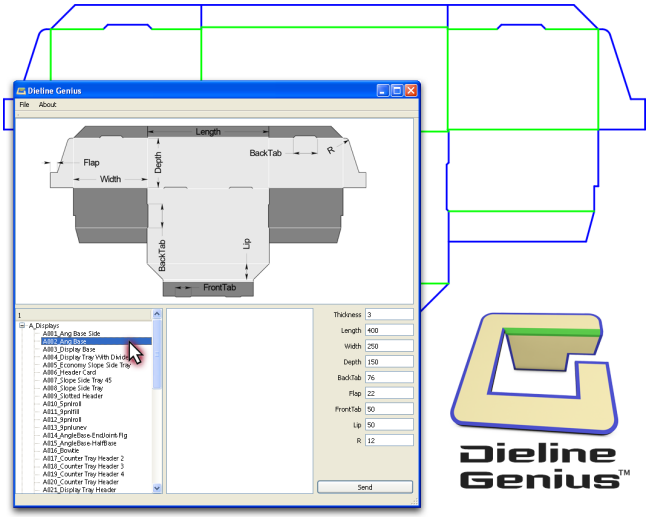
Cobalt™ Plus and Xenon™ Plus Owners

Those using Cobalt and Xenon Plus can upgrade their companion license to Graphite now and will be offered a discount off of their Cobalt or Xenon v9 upgrades later. Call us for details if you'd like to do this.

AlphaCorr™ Dieline Genius™

This month AlphaCorr released Dieline Genius 2D for Mac and Windows. Dieline Genius allows easy customization of packaging and point-of-purchase displays from the library of over 500 resizable designs. Even those without previous box design experience can quickly create corrugated and folding carton material structures.

Simply open the library and select a design. Modify the default parameters, such as length, width, depth and material thickness. Then export it directly to the cutting table.



Robert Bou, AlphaCorr co-founder, puts it this way, "Using Dieline Genius a salesperson, graphic artist, machine operator or draftsperson can select a design, set the parameters, and have the box cut on the sample table in just minutes. They don't have to spend hours learning the nuances of packaging design or interrupt the workflow of their busy structural packaging designers just for a sample."

For those who only need to occasionally create packaging and displays, look for our online and pay-per-use payment options coming soon. For those who create sample packaging as a regular part of their job, our monthly and yearly rental options make more sense.

Blessings for the Season

The Ashlar-Vellum administrative offices will be closed December 23rd through January 3rd. During this time, orders placed through our website be processed through our European offices and registration codes sent via email as usual. Please be sure to send orders to order.processing@ashlar.com. Shipping of physical materials will resume the week of January 6th.

Requests for demo codes will be monitored and fulfilled. Technical support will be handled as usual through our website. To start a support ticket go to our Support Centre or send an email to support@ashlar.com.

The AlphaCorr offices will be on reduced staff December 23rd through January 8th. During that time orders placed will be processed through our European offices. Please send orders to order.processing@alphacorr.com and hardware keys shipped directly from our supplier.

Requests for demos will be monitored. Technical support will be handled as usual through our website. To submit a support ticket go to our Support Centre or send an email to support@alphacorr.com.

We wish you a blessed holiday season and a new year filled with joy.

Dear Ashlar-Vellum...

Dear Ashlar-Vellum: Most laser and water jet cutting vendors that I've contacted prefer solid models in a Solidworks format over any other format. I would prefer, however, to use my MAC and either Argon™, Xenon™, or Cobalt™. What should I do to send files to laser and water jet cutting facilities who ask for a 3D solid in a Solidworks format.

—A Devoted Mac User

Dear Devoted: Laser and water jet cutting of steel plate is a 2D process. In the end, the vendors need 2D vector files to drive their cutters. They are afraid of getting 3D wireframe or 3D surface files that must be carefully converted or 2D files that are incorrectly created.

Therefore they ask for a 3D solid so that the conversion process to 2D is under their control, and they ask for that 3D solid file in Solidworks format because they've come to know the vagaries of that particular software and wish to convert the file themselves, dealing exclusively with the devil that they know.

If, however, you give them a 3D solid file in either ACIS (.sat) or Parasolid (.x_t) they can bring that file right into SolidWorks perfectly.

Some other benefits of preparing 3D solids for use by 2D plate cutting equipment is that by their very nature, 3D solids can only contain fully closed loops for the flat edges, and cannot contain any duplicate lines on an edge. Plus, every edge can only be used in one specific part. With most 2D file creation processes, it is all too easy not to close the loops to the mathematical precision required, or to accidentally duplicate edges, or share lines between nested parts.

—Ashlar-Vellum Product Management

Dear Ashlar-Vellum: are Graphite™ v8 and v9 compatible with Apple's OS X 10.9, aka Mavericks?

—An Avid Mac User

Dear Avid Mac: In all of our testing, Ashlar-Vellum Graphite v8 and v9 2D/3D precision CAD software both appear to work with OS X 10.9 Mavericks the same as they work with OS X 10.7 and 10.8.

Specifically, the only issue is with the scroll bars, which no longer feature the stepper arrows at the ends, as dictated by the new OS X standards. Nor are the scroll bars dynamic, but require that the mouse be released to have the screen update. In order to maintain Apple UI compliance, Graphite's stepper arrows will not re-appear in v9, however, it is our goal to have the bars become dynamic again.

The pan tool, on the other hand, works fine, as does the space bar pan, and the scroll wheel which zooms out, pans over and zooms back in at the same level, making Graphite completely usable under Mavericks.

As with everything, it often takes thousands of customers using the software to bring out the minor glitches. If anything is discovered by customers that prevents the final build of Graphite v8 (SP4 Build 8.9.18) from working on Mavericks we do not plan to fix it in v8. We would plan to fix it in a future build of v9.

While Graphite v8 operates on Mavericks, it is not optimized for this operating system's unique features. We will start taking advantage of some of these new features during the v9 release cycles, some in the initial release and some in subsequent point releases and service packs.

—Ashlar-Vellum Product Management

Interactive Version

Light Years Ahead with SteelRules™

Dies Inc. of Kansas City, Missouri is a tool and die-making facility developing flat and rotary dies for the production of corrugated packaging and other manufacturing processes.

Dies Inc. chose AlphaCorr SteelRules for its functionality and supreme ease-of-use, its plug-and-play interface with their internal network, and its smooth integration with their existing production hardware.

As an experienced AutoCAD drafter, Mike provides customer service and manages the orders from concept to production, through revisions and file translation. He particularly likes how SteelRules' straightforward interface gives the team speed and higher productivity.

As a fairly new user, Mike was particularly impressed with the training he received from AlphaCorr's Michael Collins.

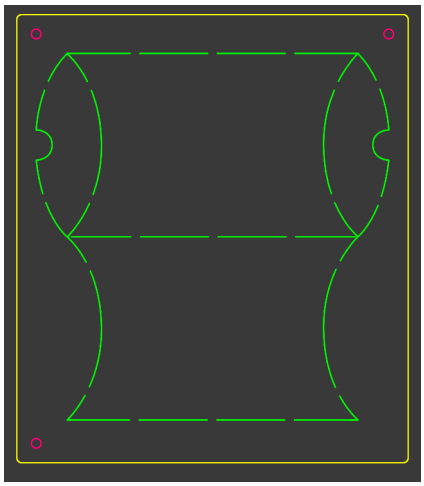
"I especially applaud the training that we got from the gentleman that came out to physically see us. It just seemed really smooth. He really simplified it, especially for me, and used a lot of language that would be universally understood and not just to software or industry specific, so he was really good at that."

For Dies Inc., SteelRules has simplified the process of corrugated sample cutting and die-making, speeding designs and greatly increasing productivity.

"Between the speed and the user friendly functionality the application has proven to be pretty beneficial. You can plainly tell it's light years ahead as opposed to the original software I'd been using which was Impact Software."

SteelRules helps Mike and the Dies Inc. team translate their design concepts to the production machines they use more quickly and efficiently. Experienced using AutoCAD, Impact, Adobe Illustrator and several other CAD and graphics programs, Mike has found that SteelRules makes things smoother in the production process.

DIES INC.



This die-board layout in SteelRules allows one click output to a laser or router.

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Interactive Version

Success Pops Up All Over for Americhip

David Rosendale of Americhip combines paper with some of the coolest technology around. Americhip creates printed brochures that talk, magazine pages that light up, and engineers movement into otherwise static advertisements. They design intricate works of art that move, pop up, twist, flip and soar from the printed page.

Rosendale's background comes out of fine arts where he studied painting and printmaking, then got into creating pop-up books through an interest in bas-relief. From there the company he was then working for moved into commercial pop-ups for magazine inserts. "People like the surprise element of the pop-up or videos going off when you open something up," says Rosendale. "It acts as a good way to get people interacting with the piece."

He joined Americhip to do Research & Development, moving them into a competitive position using CAD software and a cutting table. Today he also runs the Paper Engineering Department which brings together video, audio, lights and paper into whatever the object might be.

Rosendale has been working with Vellum®-based software since 1993 when he started with Ashlar's Vellum 3D, the precursor to Graphite CAD software. Then he moved to Score! packaging software, which was based on the Vellum/Graphite engine, prior to it being purchased by Artios and cancelled. Today Rosendale uses AlphaCorr Rules™, also based on the familiar Graphite engine.

His team at Americhip uses Rules in all phases of design and production starting with the creatives, then cutting blank samples on their machine, making colour sample layouts for the printer so they can cut them on the table, then colour samples for the clients to approve, and finally cutting the sheets from the press run. They also use Rules to make the cover for the book should there be one.

Rosendale has experience with other CAD software but he prefers Rules for its versatility. There's never been a problem he hasn't been able to solve. Others on the team use Illustrator or Pro E and they have no problem transferring files back and forth using a number of different file formats. In fact, he told us how easy it was to bring an Illustrator or other file into Rules to get extremely accurate shapes and die lines around an object or character for a pop-up.

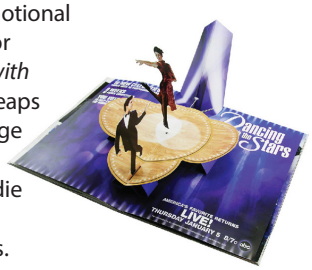
Lately the team's been working on video pieces using cores into which they drop electronics. Using Rules they work out the different layers of chipboard or plastic that need to be cut to receive the components. The sophisticated layering feature within Rules makes it easier to designate the proper cuts.

The intuitive interface and gentle learning curve make Rules an invaluable tool in Americhip's studio:

"It's the ease of use more than anything. That's been the best thing for me because I've trained up a number of people over the years and from the very beginning found that it's just very easy to work with and it's user friendly."

Above and below, a promotional pop-up for the CBS hit television show *The Big Bang Theory* created for Emmy voters.

This promotional pop-up for *Dancing with the Stars* leaps off the page using accurate die cuts from SteelRules.



Americhip's sophisticated paper engineering and embedded video delivered sales information in a unique petal design.

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Interactive Version

It All Starts with a Cobalt Model

Ken Ballard is the Director of Engineering & New Product Development for Precision Concepts Medical Technologies, a design and manufacturing company for medical devices. With operations in Winston-Salem, NC and San Jose, Costa Rica, PC-MT provides rapid prototyping and product development with full FDA-registered manufacturing.

Ballard told us he was first introduced to Vellum 2D around 1990 through a television show called *Mac TV*. He was impressed with how much easier it was to use than AutoCAD.

With customers that include the largest names in medical devices, Precision Concepts provides design and development services in a coordinated effort with the engineering departments of their client companies. From conceptual design, prototyping and tool fabrication, through manufacturing and clean-room assembly, on to packaging and direct shipping, everything can be done by Precision Concepts keeping delivery times fast and quality high. "But it all starts with a Cobalt model," says Ballard.

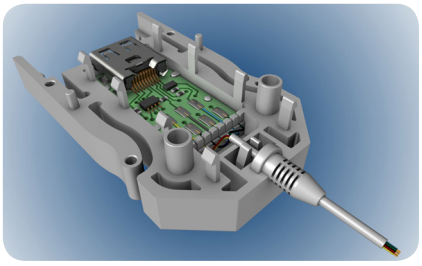
The PC-MT team takes pride in rapid model creation and unique product design and development, knowing that in today's market this is essential to remain competitive. Ballard uses Cobalt in meetings with his customers as together they come up with concepts for a new product. He tells us:

"Our customers use Pro/E and SolidWorks for their CAD/CAE platforms. Most have never seen Cobalt™ or Graphite™ in action. Nonetheless, I always draw a flurry of comments like, 'Wow, that looks so easy with that software.' As a long-time user of Ashlar-Vellum products I love to see the eye-popping reaction from people when I show them Cobalt."

PC-MT's success hinges on tight turnaround times and agile development. Ballard tells us this starts with creating a clean model in Cobalt and then being able to hand it off seamlessly to their SolidWorks engineers to create the tooling for their CNC and EDM machines. Cobalt's precision geometry is easily brought into MasterCAM as well, using both SAT and STEP formats.

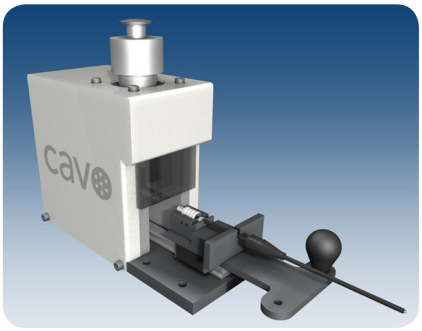
Ballard concludes:

"Without Cobalt, we could not respond to the tight customer schedules that we do. We attribute our integration of Cobalt design with our ability to respond quickly and efficiently."



Precision Concepts embedded electronic intelligence into this single-use connector to avoid patient cross-contamination.

Ken Ballard developed these disposable Cavomate 100 medical connectors using Cobalt CAD and 3D modeling software.



Ballard designed this Cavometrix semi-automatic crimp machine for creating Cavomate Series connectors.

Background/Contact

For more details on this project contact:

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