

The Design Explorer

The Ashlar-Vellum User Newsletter

First Quarter, 2011

Happy Anniversary to the Designer Elements

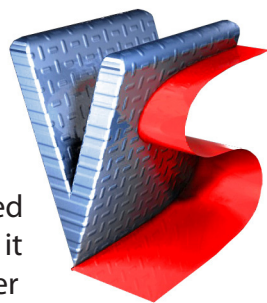
It was in the spring of 2001 that Ashlar-Vellum first introduced the Designer Elements product line including Graphite™, Cobalt™, Xenon™, Argon™ and Neon™. Graphite v6 was released on September 11th, 2001 just minutes before the planes hit the World Trade Centre. Needless to say, we didn't make the front page that day. Cobalt, Xenon, Argon and Neon v4 were released in December later that year.



In 2002 Cobalt v5 won *Cadence* magazine's Editor's Choice award. We've since discontinued Neon, an affordable little tool aimed at marketing departments for creating web-ready animations and renderings of 3D models engineered in other software. Currently on v8 across the line, v9 for all products is on the drawing board, so to speak.

Upgrades from Obsolete Software to Disappear

Now that the Designer Elements are 10 years old, upgrade paths from old Vellum 2D™, Vellum 3D™, Vellum Draft™ and Vellum Solids™ will be discontinued as of July 1st 2011. To make it possible for every customer still using this ancient software to be able to upgrade, Ashlar-Vellum is offering the following incentives in addition to the already-low upgrade prices (the ones that are going away):



Discounts apply to upgrading old Vellum 2D, 3D, Draft and Solids software only, not to any versions of Graphite, Cobalt, Xenon or Argon.

[Click here](#) to see all the things added to the new versions of Graphite, Cobalt or Xenon. Just choose your existing software from the chart for a list of added features.

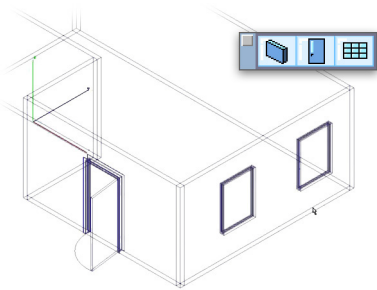
Having trouble deciding which upgrade is right for you? Turn to [page 5](#) for a brief discussion of which product would work for you.

Discount	Dates Effective	Web Coupon Code
30%	March 24-31, 2011	VELLUPGD30
15%	April 1-30, 2011	VELLUPGD15
10%	May 1-31, 2011	VELLUPGD10



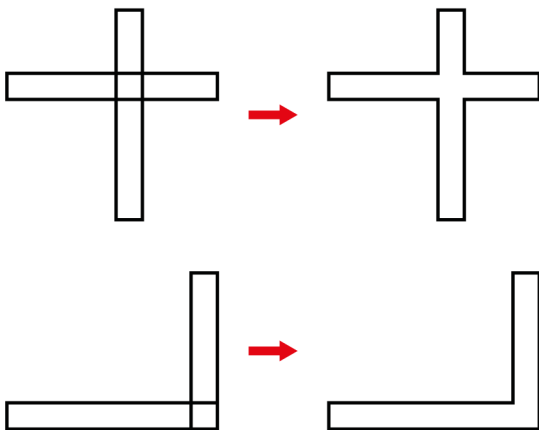
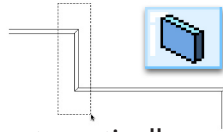
Looking Ahead

In development for future versions of Cobalt, Xenon and Argon are some new architectural tools for walls, windows and doors.



Walls

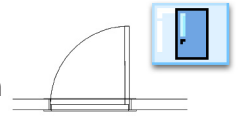
Version 9 of Cobalt, Xenon and Argon should contain Smart Walls, similar to those found in previous versions of Graphite. These are double lines that are automatically trimmed at the intersections when the walls are on the same layer. Thickness, height, angle and length can all be specified in the Status Line. Optional wall properties include hatch pattern, hatch colour, trimming, single or double lines and wall orientation such as cent line, inside or outside.



Smart Walls in action. Overlapping lines are automatically trimmed at the intersections.

Doors

Doors can be inserted in wall segments in Cobalt, Xenon and Argon. 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.



Windows

Cobalt, Xenon and Argon v9 will include a tool 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.



Training for JC Penney

Five talented designers from JC Penney's Hard Home division joined Ashlar-Vellum trainer, Nick Slaughter for Xenon training at our facilities in Austin, TX this quarter. The Hard Home group focuses on the design and production of furniture, home accessories, luggage, outdoor and seasonal items.



JC Penney designers clockwise from front left: Jay Keller, Daniel Keating, Lauren Hunter, Glenn Yelvington and Kimberly Lopez.

Ooops!

You think you're having a bad day? In January, Ashlar-Vellum sent out 5000 emails to users of Graphite v6 and v7 with a typo in the phone number. Not only was it the wrong number but it went to a telephone line that answered:

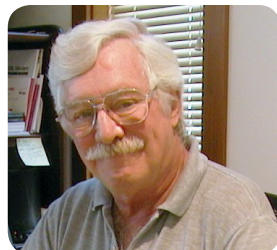
***"Welcome to 1 888 Free Sex.
If you are a man seeking a woman, press 1.
If you are a woman seeking a..."***

You get the idea.

We apologize for any inconvenience this may have caused you and hope you'll laugh with us so we don't have to cry.

Training for WLM Pattern & Machine

Bill McConnell, owner of WLM Pattern & Machine escaped the cold of Vineyard Haven, MA earlier this year and joined us in Austin, TX to expand his knowledge of 3D modelling.



An experienced Argon user, Bill recently upgraded to Xenon and wanted to get the most out of Xenon's associativity, and detail and section views. His pattern and machine shop produces the highest quality custom ferrous and non-ferrous castings and machine parts for the industrial, architectural and marine industries.

Bill is also interested in furniture building. As he puts it, "After all, patternmaking is, for the most part, precision woodworking."

His passion is for furniture in the style of Green & Green, the architects that helped pioneer the Craftsman style particularly popular in Pasadena in the early 20th century.

Advanced Training for Henry James Bicycles

Hank Folson, president of Henry James Bicycles joined Robert Bou in February for a day of advanced 3D modelling training at our facilities in Austin, Texas. Mr. Folson uses Cobalt to design custom components for high-end bicycle frames and framebuliding jigs. He was in Austin for the North American Handmade Bicycle Show at the convention centre.



Hank Folson (striped shirt) and Robert Bou discuss advanced surface modelling for Hank's next generation of custom bicycle components.

Choosing the Upgrade Path from old Vellum Software

Vellum users often ask which is the best upgrade path into our new product line. Below is a short explanation that may guide your decision.

From Vellum 3D

Vellum 3D users can upgrade to Graphite, Xenon or Cobalt depending on their needs. A good number of Vellum 3D users choose **Graphite**, our precision wireframe drafting tool. Created in the spirit of Vellum 3D v2.7, our most beloved Vellum 3D version, Graphite has an updated user interface, new tools, enhanced file translation, better performance and a number of enhanced features. It offers excellent file compatibility with all Vellum 3D files. Graphite, however, does NOT contain the shading and hidden line removal features found in Vellum 3D 3.0, 4.0 and 99. If you we're one of the few users that utilized these functions in Vellum 3D, you'll definitely want to look at Xenon.



Xenon is another logical upgrade from Vellum 3D. Based on a 3D solid and surface modelling code base, Xenon also provides advanced 2D drafting not found in Graphite. These sophisticated tools allow you to create and document any shape imaginable. Xenon has a history tree and associatively making changes fast and easy. It also has a full set of file translators. Finally Xenon includes a courtesy license to Graphite making it easy to update legacy Vellum 3D files without having to bring them into Xenon.

Finally, a few Vellum 3D users have chosen **Cobalt**, which extends Xenon's capabilities with the features listed in the section below.

For a complete list of the features available in Graphite, Xenon or Cobalt v8 over Vellum 3D v2 or v3, [click here](#). For a comparison with Vellum 3D 4.0, 98 or 99, [click here](#).

From Vellum Solids 98, 99 or 2000

This one is easy. Vellum Solids' immediate successor was Xenon for fully integrated solid and surface modelling. Optionally, Solids users could upgrade to Cobalt which adds geometric and equation-driven parametrics, assembly tools, a mechanical parts library and Geometric Dimensioning and Tolerancing to Xenon's capabilities. For a complete list of all the features available in either Xenon or Cobalt v8 over Vellum Solids, [click here](#).

From Vellum 2D and Vellum Draft 4.0, 98 or 99

Most Vellum Draft users upgrade to Graphite to continue wireframe drafting in both 2D and 3D. A few Vellum Draft users choose to make the leap to Xenon or Cobalt for integrated solid and surface modelling, wireframe drafting, photo-realistic rendering, animation and engineering drawings. [Click here](#) for a complete list of features available in Graphite, Xenon or Cobalt over Vellum Draft.



Ice Cream Dream Machine

Nick Dearden of Deardens Limited in the United Kingdom was contracted to handle the product design, manufacturing, documentation, assembly line planning and all logistics for the initial production of 5,000 soft-serve ice cream dispensers to be delivered in five months. Working with a virtual team spread throughout the United Kingdom, Dearden used Cobalt™, virtual prototyping and the internet to coordinate his network of experts and get the job done in an extremely efficient manner.

Dearden relied on Cobalt's hybrid 3D solid and surface modelling and 2D wireframe capabilities to help him think through his design ideas. Built-in rendering produced realistic visualization for both client and collaborators. Finally, Cobalt's extensive import/export capabilities supported the virtual prototyping and final manufacturing process. Says Dearden,

“Cobalt is the heart of our virtual prototyping design and development process, supplying all our solid modelling, 2D drawing and image rendering needs in the one package.”

After approval of the dispenser's exterior design in Cobalt, the team developed progressively more detailed models for a virtual prototype. Cobalt supplied the data to drive the downstream 3D information for mechanical studies, engineering analysis, tool making and manufacturing.

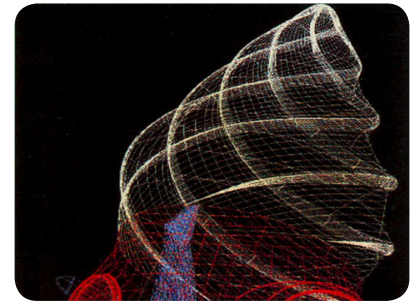
No less than 100 design reviews were required, so the ability to email rendered 3D images and engineering drawings was crucial. Dearden knew that the dispenser's swirl would produce a good deal of debate, especially since it required expensive mould tooling. Cobalt's extensive surface modelling capabilities paid off here, enabling him to create six different swirl designs, prototyped via stereolithography for evaluation.

Over 15 subcontractors across the U.K. were involved in the manufacturing process, each using 3D geometry files exported from Cobalt, including laser cutting and fabrication, FEA, STL modelling, metal part production and stainless steel casting. After mechanical testing, the go-ahead was given for production. This included injection moulding, vacuum forming, and tooling, all done in a Delcam CAM system that directly imported Cobalt files. Finally, a field manual was quickly produced using Cobalt drawings.

In only five months the ice cream dispenser went on sale in April and by July had exceeded sales forecasts. Ashlar-Vellum is proud that Cobalt allowed so many different people to contribute to the design's success.



In only five months from concepts through distribution, Deardens brought this ice cream dispenser to shops throughout the U.K.



Cobalt's surface modelling (middle) enabled six swirl designs to be prototyped using STL (above) for evaluation.

Background/Contact:

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