Ashlar-Vellum Channel Partner Newsletter
December 2014
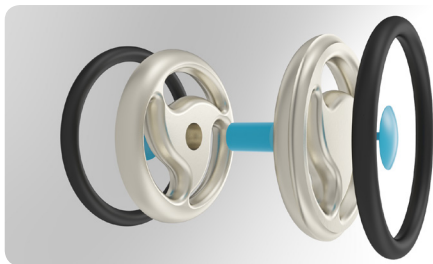
Introducing
KINETICS™
3D Motion Simulation

Intuitive motion simulation for 3D modeling.™

Ashlar-Vellum Kinetics offers an easy-to-use set of precision motion simulation tools at an affordable price point that's independent from any particular CAD or 3D modeling software. Available for both Macintosh and Windows, Kinetics enhances engineering design, optimizes product and assembly performance, and reduces the number of physical prototypes needed.

In its virtual test environment, Kinetics determines the physical movement of a model or assembly, calculates the forces and analyzes components, helping to solve common challenges through time-based motion studies.

Simply load the model, appoint the joints (connections), click the button and watch what happens as it simulates the motion and presents an analysis of your model. Unlike other motion simulation software, Kinetics follows the Ashlar-Vellum Organic Workflow™ that allows you to test parts and assemblies at any time or from any model in your design process.

Kinetics 3D Motion Simulation

Optimize product development and reduce costs:

- Intuitive time-based motion studies.
- Use your choice of 3D modeling program on Mac or Windows.
- Unique Organic Workflow allows testing at any point within the design.
- Animate individual components or entire assemblies.
- Simulate properties of motion.
- Photo-realistic rendering in real time.
- Export to a number of 3D formats.

Yo-yo toy assembly exploded and rendered in Kinetics. Model designed by Troy Starkey.

Interactive Version

Render with realism—Apply materials from the extensive library then render in real time for high quality visualization.

Export in 3D—Share your simulation in any number of different ways including 3D PDF, 3D HTML and proprietary file formats that support tablets.

Animate components and assemblies—Show machine motion or walk through an environment.

Simulate motions in Kinetics—define time-based, rigid body studies using kinematics or dynamics. Determine motion optimization by evaluating actuator force and joint loads. Assess product performance through it's cycle of operation. Analyze the design for range of motion, part displacements and overall performance.

Works with files from all leading modelers—Kinetics accepts precision (analytical) and approximate (polygonal) models from other leading software including:

- Ashlar-Vellum Cobalt™, Xenon™ or Argon™
- Dassault Systems SolidWorks
- Siemen's Solid Edge
- Trimble Sketchup
- Rhinoceros and More...

KINETICS ™

Intuitive motion simulation for 3D modeling.™

Kinetics' 3D motion simulation offers a complete set of commonly used tools that are easy to understand and set up. Available on both Mac and Windows, Kinetics supports 3D models from almost any analytical or polygonal modeling software. Using Ashlar-Vellum's unique Organic Workflow™, motion testing can be applied at any point within the design process. Kinetics offers:

- 3D Animation and Motion Simulation
- Unique Working Environment featuring Organic Workflow™
- A Complete Set of Precision Import/Export Translators Including ACIS SAT, Parasolid, IGES, STEP, DXF, DWG, and More
- Photo-realistic Rendering
- 3D Scene Builder

Forces & Motion Drivers
- Revolute (hinged)
- Prismatic
- Fixed
- Spherical
- Cylindrical
- Force
- Torque
- Spring

Approximate Polygonal Modelers Supported
- Trimble Sketchup
- Strata 3D
- Blender
- Autodesk 123D

Precision Analytical Modelers Supported
- Ashlar-Vellum Cobalt™
- Ashlar-Vellum Xenon™
- Ashlar-Vellum Argon™
- Dassault Systems SolidWorks
- Siemens' Solid Edge
- Ansys Space Claim
- Form Z
- Rhinoceros
- Autodesk Inventor
- Autodesk Fusion 3D
- Kubotek Key Creator
- IMSI TurboCad

3D Exports
- Collada (*.dae)
- 3D PDF
- HTML 5 / Web GL
- U3D
- Wavefront (obj)
- SketchUp
- OSG
- IVE
- OSGB
- FBX
- KeyShot (*.bip)
- STL (ASCII and binary)
- DirectX (*.X)
- 3D Studio Max (*.3ds)
- DWF (Windows only)
- DWFX (Windows only)
- Indigo (*.igs)
- DWG
- DXF

Semi-conductor Test Head Manipulator designed and modeled by Richard Somers. Rendered in Kinetics.

3D Imports
- SketchUp 2014
- FBX (2015.0)
- Collada (*.dae)
- IGES
- STEP
- Rhino 5.0
- PDF 3D (U3D Based)
- U3D
- 3D XML (CATIA)
- Wavefront (OBJ)
- 3D Studio Max (*.3ds)
- OSG
- STL
- DWF/DWFX (Windows only)
- SolidWorks 2014 (Windows only)
- SolidEdge (ST6) (Windows only)
- Inventor (2015) (Windows only)
- ACIS (Windows only)
- Parasolid (Windows only)
- IFC
- DWG (AutoCAD 2015)
- DXF

System Requirements
- Windows / Macintosh
- Windows XP / 7 / 8.1 (x32 or x64)
- OS X 10.7 / 10.8 / 10.9 / 10.10 (Intel only)
- 32 MB Accelerated Video Card w/ Open GL
- Medium- to High-performance Workstation-class Graphics Subsystem Recommended for Real-time Rendering or Complex Files
- 1 GB RAM Required / 2+ GB Recommended / Large Projects May Require Much More
- 2 GB Free Hard Drive Space Required / 8+ GB Recommended
- High Speed Internet Connection, or USB Port, or DVD Drive Required to Install
- Internet Connection and/or Email Required for License Activation
- (Software Downloaded to USB Flash Drive, or Recorded on DVD Available at Additional Cost)

Creative **Intuition**
Powered by Vellum ™

Kinetics Bundles

Ashlar-Vellum is offering specially priced subscription bundles with our CAD and 3D modeling software and Kinetics:

	Yearly Subscription	Monthly Subscription
Argon™ v8 + Kinetics	US $ 445.00	US $ 44.95
Xenon™ v8 Plus + Kinetics	US $ 895.00	US $ 89.95
Xenon v8 Solo + Kinetics	US $ 545.00	US $ 54.95
Cobalt™ v8 Plus + Kinetics	US $1,095.00	US $109.95
Cobalt v8 Solo + Kinetics	US $ 745.00	US $ 74.95
Graphite™ v9 + Kinetics (Includes special Graphite Surfacer until release of Graphite v10.)	US $ 545.00	US $ 54.95

Graphite™ Surfacer

The feature list for Graphite v10 includes the ability to hang polygonal (approximate) surfaces on a Graphite wire frame, similar to those in Trimble Sketchup. Built on our 3D modeling core, Graphite Surfacer will temporarily bridge the gap between Graphite v9 and v10, allowing Graphite users to utilize Kinetics for architectural walk-throughs or to visualize simple 3D machine models. Graphite Surfacer registration codes will be issued upon request when a Kinetics subscription is purchased by an existing Graphite user or when purchased as a bundled subscription.

Holiday Hours

All of us at Ashlar-Vellum and AlphaCorr wish you and yours the best this holiday season. The Ashlar-Vellum and AlphaCorr administrative office will be on reduced staff December 22nd through January 7th. During that time, orders placed will be processed through our European offices. For AlphaCorr, hardware keys will be shipped directly from our supplier. Requests for demos for both companies will be monitored. Technical support will be handled as usual through our website.
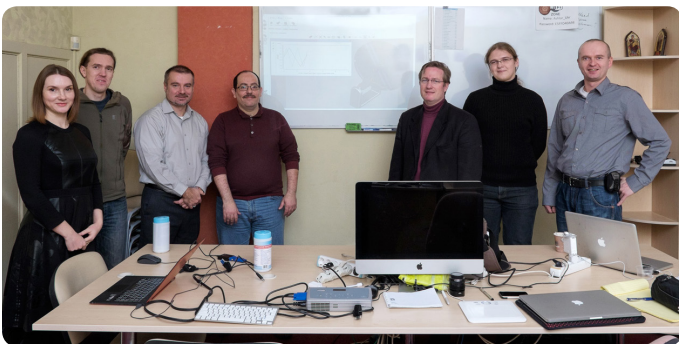
Simlab Trains Ashlar-Vellum

Simlab Soft president, Ashraf Sultan, met Ashlar-Vellum president, Robert Bou, and director of operations, Vladimir Karpenko in Kiev, Ukraine for Kinetics training with our development, support, QA, documentation and graphics teams.

The team watches as Mr. Sultan demonstrates a feature of Kinetics.

Ashraf Sultan contemplates Robert Bou's demonstration of a kinematic movement.

Some of those attending training from left to right: Galina Ovsyanko, Konstantin Zinchenko, Vladimir Karpenko, Ashraf Sultan, Robert Bou, Anton Yourchenko and Alexander Kukarin.

Bou to Japan

Robert Bou met this month with Comnet, our Japanese business associates in Kobe, Japan. They discussed plans for Vellum Nitrogen™ v9 SP2 and Box Vellum Nitrogen™. Then Bou showed them a preview of Kinetics.

The Comnet team clockwise from left: Mr. Takumi, Mr. Inoue, Mr. Hakariya, Mr. Kanemitsu, and Mr. Carpini.

Q4 Edition of *Design Explorer*

The Forth Quarter edition of the *Design Explorer* user news letter goes out this week to our customers and prospects. In this addition:

- Ashlar-Vellum Kinetics Product Page
- Ashlar-Vellum Kinetics Specification Page
- Kinetics Bundles
- Graphite Surfacer
- Graphite v9 Sp1 HP1
- Support for Yosemite
- AlphaCorr™ Folding Genius
- Holiday Hours
- AlphaCorr Turnkey System
- Pronghorn Overland Exhibition
- Whatever Happened to Iridium™
- AlphaCorr Database Server
- Dieline Genius™ Online
- Circles into Squares
- Keeping the Ball in the Air