Autodesk and Vela Systems Collaborate to Provide Building Information Modeling for the Field

August 5, 2009

Vela Systems Field BIM Software Suite Bi-directionally Integrates with Autodesk Navisworks Software

SAN RAFAEL, Calif., Aug. 5 /PRNewswire-FirstCall/ -- Autodesk,Inc. (Nasdaq: ADSK), a world leader in 2D and 3D design, engineering and entertainment software, has announced that it has collaborated with Vela Systems, Inc., a provider of mobile field automation software for the architecture, engineering and construction (AEC) industries, to integrate Vela Systems Field BIM Software Suite with Autodesk Navisworks. Navisworks is a software tool for combining project contributions into a single, coordinated 3D building information model. This technology integration extends the building information modeling (BIM) process to the field by making it possible for Autodesk Navisworks 3D project models to reflect the state of objects within the design based on field-gathered data.

Using Vela Systems software --including bar-coding and radio-frequency identification (RFID) tracking technology--builders on-site can access a data-rich Autodesk Navisworks project model during the construction phase. Instead of leaving the Autodesk Navisworks model and its data behind in the office or job trailer, jobsite users can work with Vela Systems software on mobile tablet computers to access the intelligent model on-site. This makes it possible to track material production and installation, manage commissioning, conduct quality assurance/quality control inspections, do punch lists and create electronic owner-handover documentation. Autodesk Navisworks users may designate which information will be managed in Vela Systems and, as a result, the Vela Systems software enables this data to be properly managed and used in the field. The integration between the products is bi-directional and automated. The result is that the information from the field connects the "should be" state-of-design to the "as-is" state-of-construction.

New Solution Applied to Autodesk AEC Headquarters in Waltham, Mass.

During the construction of Autodesk's new AEC headquarters on Trapelo Road in Waltham, Mass., Tocci Building Corporation utilized Vela Systems Materials Tracker and Issues and Punchlists software products. By combining Vela Systems software with Autodesk Navisworks, all parties were able to monitor and track office workstations at the new Autodesk facility. Vela Systems Materials Tracker pulled objects from the Autodesk Navisworks model through an automated integration, and then captured their status information (for example, delivered, ready-to-install, installed or damaged) from the field. This field gathered data was then deposited into the Autodesk Navisworks model. Tocci and subcontractor Creative Office Pavilion were then able to visualize and monitor the installation and quality status of workstations in real-time, making it possible to plan for shortages or discrepancies accordingly.

The benefits of extending BIM to the field on the Autodesk headquarters project were threefold. First, upon delivery, the inventory of available workstations was confirmed against the model - this revealed that all necessary components were on-site ahead of the actual delivery manifests so the next phase of work could begin sooner. Then, the staging, assembly and installation processes for workstations were tracked from Vela Systems back into the Autodesk Navisworks model through color coding of model elements. This enabled the team to visualize available inventory and coordinate installation processes more efficiently. Last, the quality control processes of final inspection and owner punch lists were automated in the field with Vela Systems and linked back to the Autodesk Navisworks model, improving team communication and project delivery.

"Tying together field data with the model creates new opportunities for construction delivery methods and oversight," said Tocci Building Corporation general superintendent, Bob Tierney. "By using the integrated Autodesk and Vela Systems solution on this project, we demonstrated how we can connect the 'virtually built' building to the 'physically built' one. The model gives us better oversight because everyone can instantly visualize problem areas as 'hot spots' with live data from the field. It is the obvious next step for contractors looking to maximize the value of BIM."

"The combination of using 3D modeling tools and practicing BIM is helping to transform the building industry," said Tim Douglas, Autodesk industry solutions manager, construction. "The integration of Vela Systems Field BIM solution into Autodesk Navisworks software provides our customers with better accuracy and efficiency for the duration of the project--beginning in the design phase and continuing through field implementation and handover."

"By integrating Vela Systems and Autodesk Navisworks, our joint customers can leverage the transformative power of BIM beyond design into the construction process," said Tim Curran, CEO, Vela Systems. "By leveraging the model in the field, contractors benefit from greater efficiencies and owners get a better end product."

BIM is an integrated process that allows architects, engineers and builders to explore a project digitally before it's built. Coordinated, reliable information is used throughout the process to design innovative projects, accurately visualize appearance for better communication, and simulate real-world performance for better understanding of important characteristics such as cost, scheduling and environmental impact.

About Autodesk

Autodesk, Inc., is a world leader in 2D and 3D design and engineering software for the manufacturing, building and construction, and media and entertainment markets. Since its introduction of AutoCAD software in 1982, Autodesk has developed the broadest portfolio of state-of-the-art Digital Prototyping solutions to help customers experience their ideas before they are real. Fortune 1000 companies rely on Autodesk for the tools to visualize, simulate and analyze real-world performance early in the design process to save time and money, enhance quality and foster innovation. For additional information about Autodesk, visit www.autodesk.com.

Contact: Paul Sullivan, 603-289-8987 Randi Tanguay, 617-692-0515
Email: paul.sullivan@autodesk.com randi.tanguay@fleishman.com

(Logo: http://www.newscom.com/cgi-bin/prnh/20050415/SFF034LOGO)

SOURCE Autodesk, Inc.

Photo: http://www.newscom.com/cgi-bin/prnh/20050415/SFF034LOGO
http://photoarchive.ap.org
PRN Photo Desk, photodesk@prnewswire.com
Web Site: http://www.autodesk.com
http://www.prnewswire.com