



Autodesk Teams with Trane, GeoPraxis, and Elite Software to Link Design and Engineering Analysis Applications

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Integrated Connection Between Autodesk Building Systems 2005 and Alliance Member's Applications Drives Down Engineering Design Costs

SAN RAFAEL, Calif., Jul 13, 2004 /PRNewswire-FirstCall via COMTEX/ -- Autodesk, Inc., (Nasdaq: ADSK) the world's leading design software and digital content company, today announced increased engineering analysis capability by closely linking Autodesk(R) Building Systems 2005 and applications from Autodesk alliance members Trane, GeoPraxis(TM), and Elite Software. Autodesk has worked closely with these industry leaders to deliver robust design and analysis capabilities for HVAC, energy and fire protection engineering that help significantly reduce the time and cost of conducting engineering analysis. Engineers can now seamlessly share data between Autodesk Building Systems 2005 and analysis applications that perform heating and cooling load calculations, sizing calculations, and energy calculations. By enabling engineering professionals to more easily create, manage, and share critical building design information, Autodesk and its alliance members are helping improve the accuracy of building models, speed time to project completion, meet the performance requirements for sustainable design, and reduce the overall cost of building design.

"The collaboration between Autodesk, Trane, GeoPraxis, and Elite Software represents a significant milestone in the engineering industry," said Phil Bernstein, FAIA, vice president, Autodesk Building Solutions Division. "Engineering professionals now have an optimized workflow process that can increase project profit by cutting days, even weeks, from the time required to complete design and engineering analysis."

Autodesk Building Systems 2005 Maximizes Productivity

Autodesk Building Systems, which was specifically created for mechanical, electrical, plumbing, and fire protection (M/E/P) engineers, helps enable faster, more accurate analysis and design, resulting in higher quality deliverables and better building performance. By easily detecting physical interferences and better coordinating information across disciplines, design professionals can resolve potential conflicts during design rather than on site and can minimize costly rework and waste. Further improving drawing accuracy and productivity, Autodesk enables third-party applications to import Building Systems design data through standard file formats, including gbXML and ddXML, in addition to an open application programming interface (API). Unlike other CAD applications, the engineering data is stored in the objects within the Building Systems model, and can be directly extracted from the object for use in third-party applications. This unique capability dramatically improves the workflow process, enabling M/E/P firms to devote less time on construction administration and more effort on new projects to improve overall business operations with delivering higher quality deliverables on time and within budget.

"The exchange of engineering design data through gbXML and ddXML between Autodesk Building Systems 2005 and Trane's TRACE(TM) 700 and VariTrane(TM) Duct Designer software will help engineers achieve a new level of productivity while improving the overall quality of their building design and energy analysis," said Joe Riemer, Marketing Manager, C.D.S.(TM), Trane.

Engineering analysis is critical to the success of any building project. In the past, conducting the analysis involved manually transferring information from the building design to engineering analysis applications. This process, while necessary, exposes professionals and the firms they represent to potential inaccuracies caused by human error when entering information. Additionally, manual data entry doesn't add value to the engineering process. Instead, it's a time-consuming effort that limits the ability to offer design options without significant cost impacts. Autodesk Building Systems 2005 eliminates this tedious process and improves engineering accuracy by enabling engineering data to be digitally imported and exported to common third-party analysis applications.

"Until the advent of Autodesk Building Systems 2005, linking systems design software to analysis applications was extremely cumbersome," said Bill Smith, president, Elite Software. "Now with Building Systems 2005, designers can draw and have calculations automatically performed right from the drawings. This information is then brought back into the building model enabling the user to automatically size systems. This is a huge time saver."

Alliance Members Facilitate Improved Process for Engineering Analysis

Recognizing the opportunity to transform the engineering workflow process through advancements in technology, Trane, GeoPraxis, and Elite Software have taken the lead in utilizing engineering data created with Autodesk Building Systems 2005. Using applications from these providers, engineering professionals can improve productivity and calculation precision by sharing information between engineering programs.

-- Trane, a leading global provider of indoor comfort systems and comprehensive facility solutions, streamlines duct design and building analysis by importing Autodesk Building Systems 2005 design data in TRACE 700 and VariTrane Duct Designer. With the TRACE700 program, engineers can gain efficiencies in the building system and equipment designs on the basis of energy utilization and life-cycle cost. VariTrane Duct Designer helps optimize supply duct design and improves design accuracy while reducing the time required transferring information between programs. For more information, please visit www.trane.com.

-- GeoPraxis, leading the effort towards building energy analysis tools and web-based solutions, now provides architects and engineers access to the simplest, most powerful energy analysis solution. The Green Building Studio(TM) (GBS) web service dramatically changes the way buildings are designed by removing the barriers to energy use

information for early energy-related building design decisions. Building design information is exported from an Autodesk Building Systems 2005 model through an open XML standard, gbXML, to calculate annual energy consumption, costs, and a wide range of data on the building heating and cooling loads. For more information, please visit www.geopraxis.com.

-- Elite Software, developers for HVAC, electrical, plumbing and fire protection design software, now provides engineers access to Autodesk Building Systems 2005 models from HVAC duct sizing and fire protection analysis solutions. Using Ductsize, engineers can import duct systems from a drawing file created with Building Systems 2005, calculate duct sizes and pressure loss information, and automatically update the drawing and redraw the ducts and fittings with the sizes that Ductsize calculated. Like Ductsize, Elite's FIRE application imports pipe systems from a drawing file created with Autodesk Building Systems 2005. FIRE quickly performs all necessary hydraulic calculations, including the analysis of flow and pressure information to verify the critical path of the system according to the imported design data. For more information, please visit www.elitesoft.com.

"By connecting to design applications like Autodesk Building Systems 2005, the Green Building Studio web service uses information from the design models to provide almost immediate feedback on the energy implications of engineering designs," said John F. Kennedy, GeoPraxis' President and CTO. "This enables engineers to understand the energy implications of their design decisions and more economically achieve the stringent demands for green building design."

The interoperability with these third party applications requires the latest Service Pack for Autodesk Building Systems 2005. For more information, visit www.autodesk.com/buildingsystems-updates.

For more information about how these applications deliver value, visit www.autodesk.com/buildingsystems-partners.

Autodesk Subscription and Consulting Add Value to Software Investment

When combined with Autodesk(R) Subscription, Building Systems 2005 delivers the easiest way to keep design tools and learning up to date. For an annual fee, users get the latest version of Autodesk Building Systems, web support direct from Autodesk, self-paced training options, and a broad range of other technology and business benefits. For more information, contact your Autodesk Authorized Reseller or visit www.autodesk.com/subscription. Additionally, Autodesk Consulting offers services that are crucial to help streamline business processes and help customers get the best possible return on their investment in Autodesk technology. For more information about Autodesk Consulting, including integrated consulting and training, see www.autodesk.com/consulting.

About Autodesk

Autodesk is the world's leading design software and digital content company, offering customers progressive business solutions through powerful technology products and services. Autodesk helps customers in the building, manufacturing, infrastructure, digital media, and wireless data services fields increase the value of their digital design data and improve efficiencies across their entire project lifecycle management processes. For more information about the company, see <http://www.autodesk.com>.

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