

**Autodesk®**

Navisworks® 2010

Experience the project,  
before it is real.



Autodesk®

# You Can All Get Along

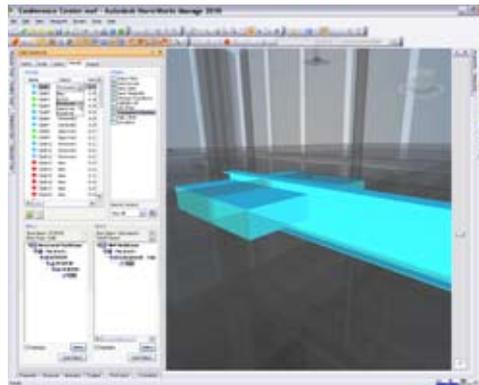
## Visualize and simulate to analyze your 3D design models from multiple formats.

By enabling existing detailed 3D design models to be aggregated and shared for review between all project stakeholders, Autodesk® Navisworks® solutions are at the heart of your building information modeling (BIM) workflow. BIM is the creation and use of coordinated and computable information about a construction project during and beyond the design and build phase.

Autodesk Navisworks software applications combine design data created by applications—such as the AutoCAD and Revit® families of products—with geometry and information from other design tools that can be reviewed in real-time as an entire 3D project, in multiple file formats and regardless of file size. Navisworks software products provides stakeholders a whole-project view for improving design decision making, construction documentation, and performance prediction and planning, straight through to management and operation of the facility.

The Autodesk Navisworks software family consists of four products to help you and your extended teams experience enhanced control, and use existing 3D design data to gain insight and predictability to improve productivity and quality on even your most complex projects.

**Autodesk® Navisworks® Manage** software is the comprehensive review solution used by design and construction management professionals for smooth-running projects. Navisworks Manage combines precise fault-finding analysis and interference management together with dynamic 4D project schedule simulation and photorealistic visualization.



**Autodesk® Navisworks® Simulate** software offers precise replication of design intent and modeling of 4D construction schedules, enabling previsualization of construction projects. Virtually experiencing your project in a visual context before physical work begins enables more complete evaluation and verification of the materials and textures appropriate to your intended design.



**Autodesk® Navisworks® Review** software enables whole-project real-time visualization and review of various file formats regardless of file size.



**Autodesk® Navisworks® Freedom** software is the free\* viewer for files in Autodesk Navisworks NWD and 3D DWF™ formats.

# Work Together, Surge Ahead

Autodesk Navisworks software solutions enable project design and building professionals to unite their contributions into a single, synchronized building model rich in information.

## **Autodesk Navisworks Manage** **Coordinated, Consistent, Complete**

Including all the functionality of both Autodesk Navisworks Review software and Autodesk Navisworks Simulate software with powerful clash detection capabilities, Autodesk Navisworks Manage software provides the most comprehensive Navisworks design review solution for your construction project. Enabling consistent, coordinated, and complete construction documentation, Navisworks Manage streamlines workflow across your organization and extended teams, helping to reduce waste, increase efficiency, and reduce change orders.

Navisworks Manage delivers real-time visualizations, enabling walk-through and exploration of complex 3D models and all the project information they contain without the need for preprogrammed animation or advanced hardware.

Through effective identification, inspection, and reporting of potential interferences in a 3D project model, Navisworks Manage reduces error-prone manual checking. Navisworks Manage enables users to check time and space coordination, improving site and workflow planning. Control and peace of mind are enhanced through advanced analysis and coordination of 3D designs. Early fault prediction and error recognition help to prevent eventual, more costly, miscalculations. Combine 3D data in multiple formats, no matter what file size, into a comprehensive, realistic building information model for viewing and analyzing all digital information.

Autodesk Navisworks Manage combines precise fault-finding with hard, soft, clearance, and time-based clash management. Quickly review and cross-check geometry created by competing 3D design software. Maintain a complete and valuable record of all interferences found throughout your project. Check for time and space coordination and greatly reduce workflow issues at the planning stage. Point- and line-based clashing enable coordination of a laser-scanned as-built environment with the virtual model.

## **Autodesk Navisworks Simulate** **Where Design Meets Deadline**

Autodesk Navisworks Simulate software significantly enhances the real-time visualization capabilities of Autodesk Navisworks Review with easier creation of images and animations, as well as dynamic linking of existing 3D models and project schedules. Navisworks Simulate helps design and building professionals share and combine output for creation of clear, descriptive content that demonstrates design intent, validates decisions, and authenticates schedules.

At any time in the process, replicate entire projects through photorealistic visualizations and 4D construction schedules that both demonstrate and explain design and build options. Navisworks Simulate enables you to quickly apply or read textures, materials, and lights to or from existing 3D models. You can also apply RPC content to your existing models.

Navisworks Simulate enables project stakeholders to see the future results of their work through interactive, realistic renderings and walk-throughs. 4D simulations and object animations simulate design intent, stimulate design ideas, and enable exploration of every design possibility. In addition, the software enables smooth, shared review at every stage of the creative process, helping to reduce errors, enhance quality, and save time and money.

Simulation in 4D enables better planning and helps identify risk at the earliest possible stage, reducing potential waste. By providing a clear, common understanding of design intent, construction plans, and current project status, Navisworks Simulate demonstrates construction schedules by linking 3D model data to project schedules for fast 4D visualization.

Navisworks Simulate enables more complete emulation of the appearance and construction of your project. Experiencing your project before it is real, at any time in the process, makes for more accurate planning and less guesswork.

## **Autodesk Navisworks Review** **Visualize, Explore, Experience**

Autodesk Navisworks Review software extends access to existing design data to enable real-time visualization, exploration, and experience of 3D projects before they are real. Accessible building information models enable project stakeholders to focus and collaborate more effectively, and provide valuable information after the designing and building is over. Dynamic navigation and an intuitive project review toolkit improve understanding of even the most complex 3D models.

Compatible with most major 3D design and laser scan formats, Navisworks Review can quickly combine 3D files into one shared virtual model, enabling stakeholders to review geometry, object information, and linked ODBC databases. Collision detection, gravity, and a third-person view further improve the realism of the Navisworks Review experience. Quickly create and output animation and viewpoints into still pictures or movie formats. Cross-sectioning, markup, measurement, and text overlay capabilities are also available, together with the ability to play back content created in Autodesk Navisworks Simulate.

## **Autodesk Navisworks Freedom** **Freedom to View**

All simulations and output saved in NWD format using Navisworks Review, Navisworks Simulate, or Navisworks Manage can be viewed with Autodesk Navisworks Freedom, the free\* viewer that works just like it sounds. Navisworks Freedom offers design professionals an invaluable means of communication with compressed, secure, and streamable project review files in NWD format. A practical solution to streaming large CAD models, NWD files require no model preparation, third-party server hosting, setup time, or ongoing costs. Files may also be viewed in 3D DWF format. Effective collaboration is achieved through easier communication of design intent, collaborative reviews of stakeholder contributions, and sharing of all results.

