Autodesk®
NavisWorks® 2009

Experience the whole project, before it's real.

Autodesk®

You Can All Get Along

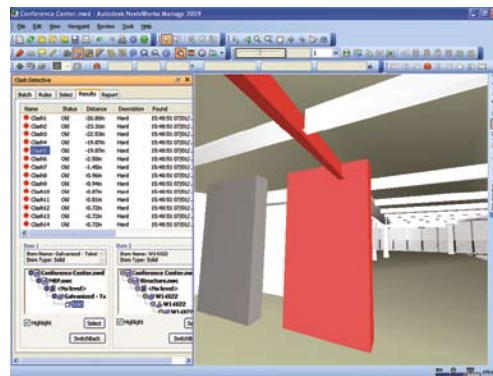## Reliably share, unite, review, and polish your 3D design models from multiple formats.

By enabling detailed 3D design models to be reliably shared, combined, reviewed, and perfected between all project stakeholders, Autodesk® NavisWorks® solutions are at the heart of your 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 vital digital project information into a single building information model that gives all 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.

Autodesk NavisWorks software consists of four products to help you and your extended teams experience enhanced control, confident collaboration, and reliable information aggregation on even your most complex projects.

By combining the high-quality information created by BIM applications such as Revit®-based software with geometry and data from other design tools, Autodesk NavisWorks products enable a real-time, whole-project view for effective 3D coordination, 4D planning, photorealistic visualization, dynamic simulation, and accurate analysis.

Autodesk® NavisWorks® Manage software provides all the tools required for smooth-running construction projects. NavisWorks Manage fuses seamless visualization of all types of models, precise replication of designs, simulation of 4D construction schedules, and powerful clash detection into one product, keeping all project stakeholders on the same digital page, whether they are creating, viewing, or reviewing 3D models.
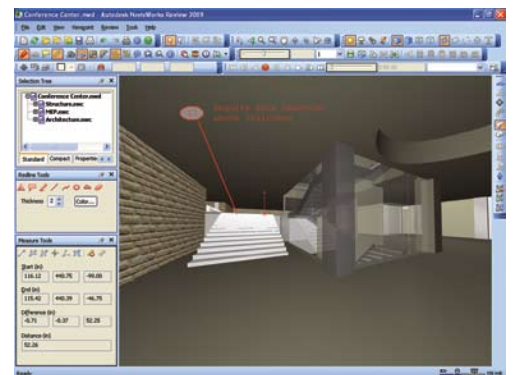

Autodesk® NavisWorks® Simulate software provides a powerful project review solution for professionals who do not require the clash detection capabilities in NavisWorks Manage. NavisWorks Simulate offers precise replication of designs and accurate modeling of 4D construction schedules, enabling previsualization 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 visualization of all types of models, regardless of format or file size. By creating a single, synchronized environment, all stakeholders can review and contribute to reduce waste, enhance quality, and improve design understanding.

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 information model.

Autodesk NavisWorks Manage
Coordinated, Complete, Correct

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

NavisWorks Manage delivers seamless, interactive visualizations, enabling real-time walk-through and review of complex 3D models and all the project information they contain. Use NavisWorks Manage to navigate and explore your designs faster, without the need for preprogrammed animation, advanced hardware, or special skills.

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 all your 3D data, no matter what file size or format, 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 virtually eliminate 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 3D models to 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. Accessible building information models emulate real-life experiences and project construction 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. What's more, 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, significantly reducing 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 enables real-time visualization, exploration, and experience of 3D design data and information, regardless of file size or format. 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 user and client understanding of even the most complex 3D models.

Fully compatible with all 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.

Autodesk NavisWorks solutions are now crucial to everything we do.

—Andrew Manington
  T5 Production Support Manager
  British Airport Authority

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For more information about Autodesk NavisWorks software, visit **www.autodesk.com/navisworks**. To learn more about Autodesk Architecture, Engineering, and Construction solutions, visit **www.autodesk.com/building**.

Autodesk Design Review
Directly publish to DWF format from Autodesk NavisWorks software applications for an alternative way to distribute and share designs. The free* Autodesk® Design Review application gives your project team an easy way to view, print, mark up, and measure changes to drawings without the original design creation software. To learn more, visit **www.autodesk.com/designreview.**

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