





## MicroStation®

Modeling, Documentation, and Visualization Software

## **Model and Document Better Designs, Faster**

With MicroStation, you can model, document, and visualize infrastructure projects of any type, scale, and complexity using a comprehensive set of design and documentation capabilities to reliably deliver even the most demanding projects. In addition, you can speed the production of detailed drawings and documentation, renderings, and animations. You can also reliably integrate any existing design content and work with any-size team using virtually any mix of design applications. MicroStation enables you to develop and document better designs in less time by better connecting you to your tools, data, and teams.

## **Integrated Modeling and Documentation Workflows**

The CONNECT Edition provides a common environment for comprehensive project delivery and connects users, projects, and your enterprise. With the CONNECT Edition, you now have a personal portal to access learning, communities, and project information. You can also share personal files including i-models and PDFs directly from your desktop with other users, or stage them for easy access from a Bentley mobile app, such as Structural Navigator. With the new project portal, your project teams can review project details and status, and gain visibility into project performance. With the CONNECT Edition, your project team may also wish to take advantage of the new ProjectWise® Connection Services including Project Performance ashboards, Issues Resolution, and Scenario Services.

## **Develop Better Designs, Faster**

Develop better realized designs with unlimited design freedom made possible by MicroStation's robust and extensive modeling capabilities, including the ability to:

## Design in 2D

Develop precise drawings using a comprehensive set of drafting tools to efficiently create 2D geometry. Rapidly progress your designs from concept to completion using persistent constraints to maintain your design intent.

"What has traditionally been a linear process from 3D design model to 2D production drawings has now come full circle. This enables our teams to have a much more fluid production workflow, in particular when working in large design teams with complex building geometry."

- Stephen Holmes, Foster + Partners



Hypermodels speed deliverable production and improve documentation clarity by immersing them within the context of 3D models.

#### Design in 3D

Develop models with a wide range of 3D design tools. Build and edit curve, surface, mesh, feature, and solids models. Build functional and parametric components with predefined variations to simplify managing and finding many similar components.

### Develop Hypermodels

Present documentation and related design information within the spatial context of the 3D model to significantly improve their clarity. Embed links to related Microsoft Office documents and websites. Easily navigate from content in one file or model to others.

#### Analyze and Visualize Models

Analyze and visualize models based on their geometry or attributes. Detect and resolve clashes; perform analysis of real-world solar exposure and shading. Apply real-time display styles to visualize models based on each object's height, slope, aspect angle, and other embedded properties.

#### Automate Common Tasks

Speed design tasks and related workflows with intelligent interactive snapping. Improve productivity with AccuDraw for dynamic data entry with heads-up display. Customize and group tools and tasks and reduce keystrokes with keyboard position mapping and the ability to quickly customize cursor menus.

#### Control and Protect Files

Ensure that only certain individuals can view and/or edit files within a pre-defined time limit. You can ensure the integrity of your documents using digital signatures and control the digital rights to view, edit, print, and copy file contents, including a pre-defined expiration date when the file can be accessed.

## **System Requirements**

#### **Processor**

Intel Pentium-based or AMD Athlonbased processor 2.0 GHz or greater

#### **Operating System**

- Windows 10 (64-bit) Home, Pro, Enterprise, and Education
- Windows 8 (64-bit) Standard, Pro, and Enterprise
- Windows 8.1 (64-bit) Standard, Pro, and Enterprise
- Windows 7 SP1 (64-bit) Home Basic, Home Premium, Professional, Enterprise, and Ultimate
- Windows Server 2008 R2 SP1 (64 bit) - Standard and Enterprise
- Windows Server 2012 (64 bit)

Internet connectivity is required to use some of the features of the product and installation of software pre-requisites.

Microsoft Internet Explorer, minimum v8.0, recommended v9.0 or later, with 128-bit cipher strength is also required.

Also supports Citrix XenApp 6.5 64-bit on Windows Server 2008 R2

#### Memory

1 GB minimum, 2 GB recommended, (more memory typically results in better performance)

## Disk Space

1.25 GB minimum free disk space

# Find out about Bentley at: www.bentley.com

#### **Contact Bentley**

1-800-BENTLEY (1-800-236-8539) Outside the US +1 610-458-5000

#### **Global Office Listings**

www.bentley.com/contact

#### **Better Informed Teams**

Ensure that all your stakeholders are better informed with clearer communication of designs made possible through intelligent deliverables production capabilities and the power of Bentley CONNECT collaboration services, including the capability to:

#### Create Animations

Produce realistic movies and simulations from design, construction, and operational models with the built-in Luxology engine. Choose from keyframe and time-based animation. Get the results you want, faster, using live on-screen animation previews and distributed network processing.

#### Create Lifelike Renderings

Create lifelike visualizations using built-in Luxology rendering. Use online and delivered libraries of physically correct materials, lighting, and rich photorealistic content (RPC). Get results faster with distributed network rendering.

#### Generate Intelligent Documentation

Generate consistent, high-quality paper and digital deliverables such as paper plots, reports, 2D/3D PDFs, and 3D physical models. Automate and speed annotation, display styles, and reports by generating them directly from the embedded properties of objects. This automates and speeds annotation, display styles, and reports and gives you confidence that they will always remain in sync with the model during work in progress.

#### Publish i-models

Exchange project models and information using i-models. With i-models, you can implement unique and powerful workflows for information sharing, distribution, and design review. These workflows can be further enhanced using ProjectWise and other products and services that leverage the power of i-models.

### Review Designs Collaboratively

Create and exchange digital markups of designs with built-in tools. You can easily markup models and drawings with redlines and comments and manage them through a markup dashboard.

#### Maintain and Enforce Standards

Ensure the proper application of organizational and projectspecific standards. Apply templates to control geometry and data standards such as styles for dimensions, text, lines, detail symbols, and more. Once designs are complete, use automated tools to check drawings for standards compliance.

## Freedom to Focus on Design

Enjoy the freedom to focus on design with better integration of information and teams made possible by MicroStation's interoperable and scalable platform, including capabilities to:

#### Geospatially Locate Projects

Transform and integrate geospatial information from hundreds of supported coordinate systems into your designs. Access data from OGC Web Map Servers, use real-time GPS data, and create and reference geospatial PDFs.

#### Incorporate Common Design Formats

Easily share and consume precise data in key industry formats such as Autodesk®, RealDWG™, IFC, Esri SHP, and more.



Produce lifelike renderings and animations to improve communications and speed approvals.

Aggregate and assemble multiple file formats including PDF, U3D, 3DS, Rhino 3DM, IGES, Parasolid, ACIS SAT, CGM, STEP AP203/AP214, STL, OBJ, VRMLWorld, SketchUp SKP, and Collada.

#### Incorporate Referenced Design Content

View and work with design information from others in real time using live referencing of 2D/3D DGN, DWG, and large image files, refreshed on demand. You can even natively reference PDF files into your designs.

## Integrate Point Clouds

Easily incorporate a wide range and scale of point-cloud data into the design environment. You can visualize, render, and measure point-cloud data to improve your understanding of existing conditions, and speed dimensioning and modeling.

#### Integrate Raster Imagery

Easily incorporate raster imagery of all types, including aerial and satellite imagery, and scanned documents. Choose from dozens of supported file formats including Google Earth KML, CALS, BMP, TIF, GeoTIFF, JPG, and many more.

## Integrate Reality Meshes

Incorporate realistic, photo-textured 3D models or reality meshes into your designs. These highly realistic models can be used directly in the design environment as the basis for your design and construction modeling for faster and better quality models.

## Manage Design Changes

Track and easily understand changes made to design files, even at the component level, throughout their lifecycle. View, plot, and selectively roll back any individual changes made throughout the history of a file.

#### Work in a Personalized Environment

You can confidently work in the right context for each project because the required settings and standards are automatically applied. You can also take advantage of personalized recommendations to help you get the most from your use of the software.

## Extend and Customize Workflows

Streamline your workflow and integrate with enterprise systems using a wide range of available tools to customize the user interface. Develop solutions using Microsoft (VBA), .NET, C++, C# as well as user-defined macros.



© 2015 Bentley Systems, Incorporated. Bentley, the Bentley logo, MicroStation, ProjectWise, and ProjectWise Connection Services are either registered or unregistered trademarks or service marks of Bentley Systems, Incorporated or one of its direct or indirect wholly owned subisdiaries. Google Earth is a TM of Google, Inc. Other brands and product names are trademarks of their respective owners. CS3225 10/15