



Bentley Map®

Powerful, Extensible GIS for the World's Infrastructure

Bentley Map is a fully-featured desktop GIS which is used to map, plan, design, build and operate infrastructure. Bentley Map enhances underlying MicroStation® capabilities to power precise geospatial data creation, maintenance, and analysis. Bentley Map works with and complements the Bentley® Geospatial Server and Bentley's mobile, web publishing, and industry applications.



Transparent buffer zones and spatial intersection analysis.



3D city map published to Google Earth.



Thematic map showing average daily traffic on a metropolitan road system.

Convergence of GIS and CAD

Bentley is a leader in the computer aided design (CAD) software industry with MicroStation. Bentley Map extends the power of MicroStation to include powerful GIS capabilities. Users can construct highly accurate, seamless geographic representations of all features being modeled and perform further advanced spatial analyses.

Comprehensive Mapping Capabilities for Infrastructure Assets

Bentley Map has unparalleled capabilities for those needing to create and maintain geospatial information as part of the management of infrastructure assets across their lifecycle. Bentley Map allows you to enforce business and topological rules defined by the Geospatial Administrator. The Geospatial Administrator also defines geographic objects, their behavior, and the GUI. Bentley Map brings the accuracy of CAD and the ease-of-use of GIS together in one environment, and it is fully compatible with all of Bentley's AEC industry applications. Bentley Map's powerful 3D editing capabilities make it the perfect editing tool for 3D City GIS projects.

Easy Access to Enterprise Data

Bentley Map facilitates geospatial data integration within the enterprise and extends the value of all types of spatial information. Bentley Map can be implemented with any two-tier database connection supported by MicroStation, a two-tier connection to Oracle Spatial or a three-tier connection to Oracle Spatial or ESRI ArcGIS. Bentley Map now includes an extension that delivers integration with Safe Software's FME – this gives Bentley Map users access to more than two hundred different data formats

XML Feature Modeling (XFM)

Bentley Map takes full advantage of XML feature modeling (XFM). Through the Geospatial Administrator, XFM lets subject matter experts create highly interactive graphic

applications without programming and provides for customization by developers in VBA, MDL, and other languages.

Topology

Topology can be created 'on-the-fly' or 'on-demand' in Bentley Map. Topological relationships are stored in the DGN file according to the same model used by Oracle Spatial.

Oracle Spatial Editing

Bentley Map can edit data directly in any standard Oracle Spatial environment employing a feature-locking mechanism for multi-user environments. Organizations can also take advantage of Oracle versioning to manage conflicts in an 'extract, edit and post to Oracle Spatial' workflow enabled by the Bentley Geospatial Server. Bentley Map also supports Oracle 3D object storage for creating intelligent city models.

Spatial Analysis and Presentation

Bentley Map includes a full suite of spatial analysis and presentation capabilities. These include tools for creating buffers around objects, performing topology overlays, creating thematic maps and more. The results of these analytical processes can be plotted, printed, or published to PDF.

High Productivity Output

Bentley Map supports high fidelity output through MicroStation where maps and prints can be published to intelligent PDFs (with 3D images, bookmarks and web links). Share your projects using Bentley's new i-models and Google Earth.

System Requirements

Processor:

Intel Pentium or AMD processor 3.0 GHz or greater

Operating Systems:

Windows 7*, Windows 7 (64-bit)*, Windows Vista (including Home Premium, Business, and Ultimate editions), Windows Vista (64-bit), Windows XP Professional (SP2 or later), Windows XP Professional (64-bit), Windows XP Home Edition (SP2 or later), Windows XP Tablet PC Edition, Windows Server 2003(SP1 or later), Windows Server 2003 (64-bit)

*Use of Oracle Spatial functionalities is not currently supported on the Windows 7 operating system.

Software Prerequisite:

MicroStation V8i (SELECTseries 1)

RAM:

512MB memory minimum, 1.5 GB recommended. More memory will typically improve performance, particularly when working with larger models.

Hard Disk:

1.5 GB free disk space minimum

Find out about Bentley at: www.bentley.com

Contact Bentley

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Global Office Listings

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Bentley Map At-A-Glance

Mapping and Infrastructure GIS

- Efficient data compilation and editing
- Design, build and publish accurate maps
- Enforce business and topological rules
- Brings CAD accuracy, ease-of-use and efficiency to GIS
- Fully compatible with Bentley's AEC applications

All the Power of MicroStation

- Smart, quick drawing and editing of GIS features in a MicroStation environment
- Raster management
- AccuSnap, AccuDraw®
- Display priority, transparency
- Full 3D modeling especially relevant for 3D City GIS projects

Map Manager

- An easy-to-learn interface to your spatial data
- Intuitive, easy-to-use, persisted map definitions
- Drag and drop layers to control display order

XML Feature Modeling

- XML metadata-driven GIS
- Extensible
- Property-based symbology
- Property-based annotation

Geospatial Administrator

- Manages the XFM framework through one interface
- Runs outside MicroStation
- Defines and maintains XFM project files

- Defines coordinate system and projection information
- User interface definition – dynamically loaded at run-time

Choice of Data Stores

- A two-tier connection to Oracle Spatial
- A three-tier connection to Oracle Spatial
- A three-tier connection to ESRI ArcGIS
- Self-contained 'XFM' DGN files
- Any RDBMS/DGN supported by MicroStation

Oracle Spatial Editing

- Fully Oracle Spatial compliant
- Three-tier connection available via the Bentley® Geospatial Server
- 3D object support
- Adheres to native Oracle Spatial feature and topology models

Topology modes

- Topology Maintenance
- Place features like any other XFM features
- Topology graph is maintained while editing
- Use shared editing commands to move common primitives

Spatial Analysis and Presentation

- Spatial analysis
- Thematic display
- Buffer creation

Map Generation and Print Preparation

- Grid and graticule generation
- Marginalia

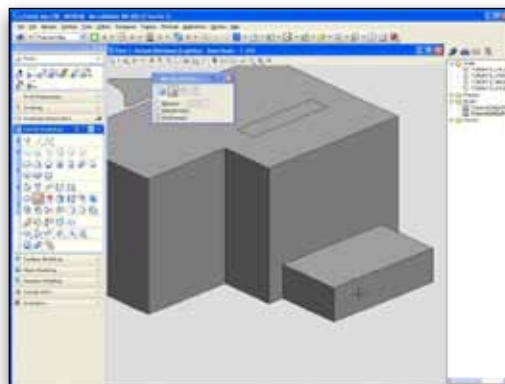
- Interactively place multi-vi borders
- Publish to intelligent PDF
- Map projection and coordinate conversion
- 5500+ projections including user defined
- Store coordinate systems information with mapping and engineering data
- On-the-fly transformation
- Data Cleanup and Integrity Tools
- Solve integrity problems with imported or legacy data
- Easily adopt XFM schema for imported or legacy data through Dynamic Feature Scoring (DFS)

Interoperability

- Direct reference geospatial formats
- MapInfo (TAB, MID/MIF), Shapefiles, Oracle Spatial, CSV and ODBC sources
- Import/Export via an easy-to-use interface
- Integration with Safe Software's FME for access to 225+ data formats

GIS Development Platform

- Subject Matter Experts can customize Bentley Map
 - » Property based symbology and annotation
 - » Criteria
 - » Methods
 - » Operations
 - » Dialogs
 - » Tool frames and tool boxes
 - » Prompts
- Developers can customize Bentley Geospatial Administrator and the Standard Placement Library via C expressions, XSLT, VBScript, VBA, MDL, and .NET API



Smart 3D object editing.



The perfect editing environment for 3D City GIS projects.