

BENTLEY® GEOSPATIAL MANAGEMENT™

A spatially managed environment for AEC and geospatial content

Bentley® ProjectWise® provides managed access to AEC and geospatial content within the workgroup, across a distributed organization, or among collaborating organizations. By working within the Bentley managed environment, AEC and geospatial professionals can streamline their project work and improve the efficiency of their operations.

Bentley Geospatial Management 2004 Edition extends the ProjectWise environment and gives spatial context to data within your managed environment. Unlike a GIS, which requires data to adhere to a strict relational data model, Geospatial Management gives spatial context to drawings, maps, models, images, and business documents in their original intended form, providing a practical and rapidly deployable system of organization to a wealth of spatially relatable data.

Dynamic and interactive map-based interfaces allow users to intuitively navigate and retrieve content based upon location. Integrated map management, dynamic coordinate system support, and practical spatial indexing tools provide the infrastructure to get up and running quickly, and to routinely incorporate new content from your projects and operations.

Practical Tools to Spatially Index Documents

To make good use of large stores of existing documents, it is critically important that the capture of spatial location be as unobtrusive as possible. For documents with inherent coordinate systems—design files, GeoTiff images, Shape files, and so forth—document location is automatically deduced. For documents that are nonspatial, the document can co-opt the location of the folder into which it is inserted. Alternatively, an administrator can use a map-based interface to define location for a document or folder of documents, as well as import MicroStation-based cartographic indexes.

Integrated Coordinate System Support

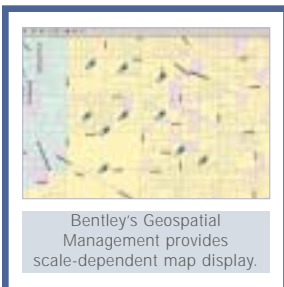
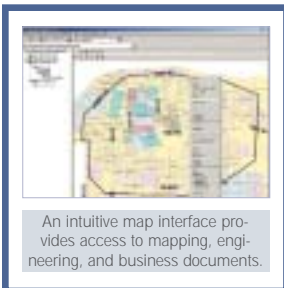
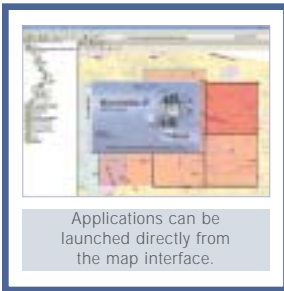
It would be an undue burden to require that all documents be transformed into the same coordinate system. A Universal Coordinate System is supported (the default is Geographic Lat/Long system on the WGS84 datum). Each document is indexed to this universal index; however, the originating coordinate system of each document is preserved. This implementation enables search of documents across the boundary of different geographic, coordinate, or engineering coordinate systems. Searches are very fast, even with thousands of documents.

Intuitive Access to a Wealth of Spatially Indexed Content

Once spatial locations are registered, documents or sets of documents can be located through an intuitive map-based interface. Any mix of spatial and nonspatial attributes can constrain a query, and can be used in combination with spatial navigation tools that enable the user to quickly locate a region of interest. Spatial queries can be constrained by a circular, rectangular, or polygonal target area. The result can be displayed as a simple list of documents, or graphically on a map. Geospatial views can be used to display documents with symbology associated to document properties such as author, time, and workflow state. MicroStation V8 and other integrated ProjectWise applications can leverage the spatial interface to locate and retrieve any document.

Rich Set of Development Tools

To integrate navigational capabilities in a variety of client applications, an ActiveX control, the Spatial Navigator, is provided. This control provides zoom, pan, and fit tools. Spatial Navigator is integrated within the primary ProjectWise clients (Explorer and Explorer Lite), and also provides an open-technology platform that enables you to create custom clients. Additionally, an HTML browser client supports Internet access, controls are provided for hand-held devices, and a Windows-based application supports intranet use.



BENTLEY GEOSPATIAL MANAGEMENT AT-A-GLANCE



Customize the map view to reflect any combination of color and translucency for document display.



Multiple documents occupying the same location are easily managed via the map interface.

Geospatial metadata

- Add geospatial indexing to documents and folders
- Extract geospatial metadata during importation with batch tools
- Allows spatial representation to be drawn on a map
- Automatic extent calculation for folders and vaults

Background maps

- Map-creation assistant provides for easy interface configuration
- Create scale-based map navigation on a per-project, directory, or vault basis
- Utilizes existing CAD file spatial location if it exists

Spatial navigation

- View and navigate documents and folders on a map
- Select and access all the ProjectWise menu from the spatial view
- Change the document presentation from geometry to symbols
- Create your own dynamic symbology based on document properties
- Spatial navigation interface supports transparency, layering, legends, and icon/bitmap representation

Searches

- Adds spatial criterion in the search tool
- Provides for locating documents based on location information

Coordinate support

- Create customized coordinate systems from standard coordinate systems
- Document footprints are reprojected on the fly

iDesktop for ArcMap

- ESRI file format support: MXD, MXT SHP, BIL BIP
- Manages the relationships between the ArcMap project file and its content
- Adds ProjectWise in ArcMap

Extension to Web Explorer Light (WEL)

- Adds map navigation in to WEL
- Adds spatial searches in the WEL

BENTLEY GEOSPATIAL MANAGEMENT SYSTEM REQUIREMENTS

Bentley ProjectWise Server

- Processor: Pentium® II Processor
- Operating System: Microsoft® Windows® 2000
- Memory: 256 MB
- Software Requirement: Internet Explorer 5.5 or higher (including WebFolder Support)

Bentley ProjectWise Client Workstation

- Processor: Pentium Processor
- Operating System: Microsoft XP Professional, Microsoft Windows 2000, Microsoft NT® 4.0
- Memory: 64 MB
- Software Requirement: Internet Explorer 5.5 or higher (including WebFolder Support), Support for Java™ 2 runtime environment 1.4 (Web Explorer client)

ABOUT BENTLEY

Bentley Systems, Incorporated provides software for the lifecycle of the world's infrastructure. The company's comprehensive portfolio for the building, plant, civil, and geospatial vertical markets spans architecture, engineering, construction (AEC) and operations. With 2003 revenues reaching \$260 million, Bentley is the leading provider of AEC software to the Engineering News-Record Design 500 and major owner-operators.

For more information, visit www.bentley.com or call 1-800-BENTLEY.

Bentley Worldwide Headquarters

Bentley Systems, Incorporated
Exton, PA, USA
+1 800 BENTLEY
+1 610 458 5000

Bentley International Headquarters

Bentley Systems Europe B.V.
JC Hoofddorp
THE NETHERLANDS
+31 23 556 0560

