



Features and Benefits Matrix

Extend the value of your maps, designs, and data with Autodesk MapGuide® 6.5 software. Now you can distribute more information to a wider audience, integrate multiple data sources or servers, and use development tools to build custom applications. With improved support for Autodesk Map™ and AutoCAD® DWG files, new support for DWF™ (Design Web Format™) data, an improved Java® Viewer, and the ability to make the most of advanced Oracle 10g features, Autodesk MapGuide is a faster, easier, more flexible way to query, analyze, and distribute business-critical information.

This document describes areas of particular importance in Autodesk MapGuide 6.5 software. The tables in the first section list the ways in which the new and improved features make it faster, easier, and more flexible for anyone, anywhere to interact with design files, maps, and GIS or CAD data. The tables in the second section summarize the key overall product features and benefits.

New and Improved Features of Autodesk MapGuide

Autodesk MapGuide 6.5 Is More Powerful

Feature	Description	Benefit
Improved support for Autodesk Map software	Users of Autodesk Map frequently create predefined queries that retrieve specific subsets of their maps. They also create thematic maps from data contained in, or linked to, a series of DWG files. Now, Autodesk MapGuide 6.5 users can take advantage of this same information by adding layers to maps that show the results of executing Autodesk Map queries or applying Autodesk Map themes to the original DWG data.	Enhance productivity with access to Autodesk Map queries, themes, and database links.
Improved support for the Autodesk DWG format	Create layers of a particular geometry type (points, polylines, and polygons) directly from a DWG file. You no longer need to convert to SDF format so that it can be themed. You can even create themes using object data or link templates as the attribute data source.	Save time by using DWG files without losing the flexibility of Autodesk MapGuide software.
Support for the Autodesk DWF format	Autodesk MapGuide software now supports DWF (Design Web Format), the premier exchange format for design data. You can create layers from Autodesk DWF files created in Autodesk Map or any other Autodesk® product that supports the DWF format.	DWF support provides access to the rich design data available in this format.

Autodesk MapGuide 6.5 Features and Benefits Matrix

Feature	Description	Benefit
Support for SQL pass-through	Access RDBMS-specific functionality, including Oracle 10g spatial functions, via support for SQL pass-through. Suppress and modify certain Autodesk MapGuide behavior, such as spatial filtering and clipping, to take full advantage of RDBMS functionality.	Direct access to all native RDBMS functionality enables Autodesk MapGuide developers to use these tools and integrate them into their applications.
Full support for OGC WMS 1.1.1 specification	Autodesk MapGuide supports the following Open GIS Consortium Web Map Service (OGC WMS) 1.1.1 interfaces: <ul style="list-style-type: none"> • GetCapabilities returns a description of the map parameters, such as the bounding box, coordinate reference system, elevation, and other descriptive elements. • GetMap returns the map image itself. • GetFeatureInfo returns information about particular features shown on the map. 	Enables you to easily integrate the Autodesk MapGuide software application into multivendor environments.
Close integration with the Autodesk® Buzzsaw® service	Open an Autodesk MapGuide application in Buzzsaw, and associate Buzzsaw documents with Autodesk MapGuide features. With the integration of Autodesk MapGuide, Buzzsaw sites can present not only simple documents but also interactive Autodesk MapGuide applications that deliver valuable geographic information system (GIS) data.	By integrating the spatial analysis and presentation capabilities of Autodesk MapGuide with the Buzzsaw project management and collaboration tools, project teams save time by accessing information in a relevant context not previously possible with other software.
Larger legends	Autodesk MapGuide legends can now efficiently manage hundreds of layers.	Save time and increase productivity by eliminating the need for labor-intensive custom solutions.

Autodesk MapGuide 6.5 Is Easier to Use

Feature	Description	Benefit
Easier Java Viewer installation	It is no longer necessary to determine in which JVM (Java Virtual Machine) to install the Java Viewer.	Even nontechnical users can install the Autodesk MapGuide Java Viewer.
Java Print Service	Provides improved printing support in the Java environment on platforms that support the Java Print Service API (application programming interface). On platforms that support the API, you no longer have to specify the dimensions of a page using the Page Setup dialog box before printing.	Printing setup time is greatly reduced for Java implementations.

Autodesk MapGuide 6.5 Is More Flexible

Feature	Description	Benefit
Mac [®] OS X support	The Java Viewer now runs on Mac OS X.	Open, standards-based XML technology makes development more flexible and applications more extensible.
Additional support for the Autodesk DWF format	With the Autodesk [®] DWF™ Writer software installed, you can capture the contents of the Autodesk MapGuide screen at any time and create a DWF file that contains the screen shot. These files can be easily distributed and viewed using the free Autodesk [®] DWF™ Viewer.	Enables you to easily distribute Autodesk MapGuide data to a broader audience.
Microsoft [®] Windows [®] Server 2003	Autodesk MapGuide Server now supports Windows Server 2003.	Extends Autodesk MapGuide to users running this new operating system.

General Features and Benefits of Autodesk MapGuide

The three key benefits of Autodesk MapGuide software are the ability to

- Distribute large amounts of data to a wide audience
- Integrate with multiple data sources or servers
- Build multiple applications using a single product

Feature	Description	Benefit
Deploy interactive, scalable GIS, mapping, and digital design data over the Internet	Publish interactive maps without dedicated technical specialists.	Reduce costs of managing GIS functionality across your local or wide area network.
Access interactive maps and designs via desktop and mobile devices	Offers point-of-activity access to interactive maps, designs, and relevant data to anyone, anywhere. Support for Autodesk [®] OnSite Enterprise enables users of mobile and handheld devices (Windows [®] CE) to access interactive maps and other data.	Extend the value of your designs, maps, and related data through convenient mobile access with full interactivity (pan, zoom, selection, reports, markup).
Data interoperability	Supports integration and access for all major GIS and CAD data formats: ESRI [®] SHP and coverages, MicroStation [®] DGN™, MapInfo [®] Interchange File, Atlas BNA, comma-separated files (CSV), Autodesk DWG, and more. Also supports most relational databases via OLE DB and ODBC, including Oracle [®] , SQL Server, Microsoft [®] Access, dBASE [®] , and more.	Get the full value from your existing data investment and reduce file conversion time and expense.

Autodesk MapGuide 6.5 Features and Benefits Matrix

Feature	Description	Benefit
Access data directly from widely distributed and disparate data sets	Direct data-access methods, including the Spatial Data Provider (SDP) architecture, allow for serving spatial and attribute data directly from a wide variety of GIS, CAD, and spatial databases, including SDF, DWG, SHP, Oracle and more.	No conversion necessary. Take advantage of your Oracle spatial data warehouse, increasing the scalability, performance, and reliability of your applications. Get easier access to disparate and widely distributed data sets by enabling developers to create spatial data providers for proprietary data formats.
Wide-ranging capabilities	Core components work together with utilities and toolkits such as Symbol Manager, Dynamic Authoring Toolkit, Raster Workshop, SDF Loader, and more for a comprehensive client/server development and interactive access environment.	Increase productivity with out-of-the-box, web-based mapping and GIS software with great ease of use. Time to application is fastest on the market today.
Raster/vector based	Work with CAD-based maps or raster images (scanned photos or drawings) such as satellite imagery.	Get the full value from existing graphic assets, including those in nondigitized archives.
Coordinate system support	Supports more than 800 worldwide coordinate systems, as well as nonmapping systems.	Ability to use virtually any coordinate system provides flexibility and improves interoperability.

Autodesk MapGuide Viewer

Feature	Description	Benefit
Free viewers	End users can download several different viewers free from Autodesk MapGuide sites. Java-enabled viewer operates on Macintosh® and Sun® SPARCstation® systems as well as on Microsoft® Windows® systems.	Makes it easy for users to access information at no cost, extending the value of your maps, designs, and related data across platforms.
Lightweight	Less than 3 MB in size, and as small as 900 KB, depending on platform.	Much smaller than similar map-based applications, with fast, easy, automatic installation.
Simple user interface	Viewer interface is easy for nontechnical users to learn.	Saves time, effort, and money for users who once had to wait in line for copies of maps or do extensive research to access data.
High level of interactivity	Users can collapse or expand themed layers, make queries, create dynamic buffering zones, run custom reports based on selected objects, print to scale, and much more.	Gives users flexibility to access, interact with, and repurpose geographic data as needed.
Multiple object selection	Select objects by list, radius, polygon, buffer, and intersection.	Provides flexibility and improves usability.

Autodesk MapGuide 6.5 Features and Benefits Matrix

Feature	Description	Benefit
Connectivity	Autodesk MapGuide has the capability to connect to multiple remote spatial and attribute databases simultaneously.	Provides top query and display performance of geographic data.
Embraces web standards	Develop map-based applications using standard technologies such as HTML, XML, JavaScript, and COM.	Familiar standards aid fast application development.
Redlining	Users can digitize features or create redline notations on a map.	Extends functionality of workgroups and significantly reduces the effort of building an advanced redlining application.
Printing flexibility	Control the elements to print on a map, including title, legend, map scale, north arrow, URL, current date and time—even a logomark.	Maps and drawings appear online exactly as they do in your creation system, as users expect to see them.

Autodesk MapGuide Author

Feature	Description	Benefit
Uses MWF, MWX, and SDF data formats	Autodesk MapGuide Author creates and modifies map files (MWF and MWX) for web publishing that store pointers to spatial and attribute data.	Optimizes performance over the web for fast access and query by the Autodesk MapGuide Viewer.
WYSIWYG display of authored maps	Easy-to-use WYSIWYG (what you see is what you get) interface.	Enables nontechnical authors to create maps with confidence.
Flexible authoring environment	Authoring environment includes <ul style="list-style-type: none"> • Thematic map settings and symbology • Attribute display by scale • Complete layer setup and definition • MDI support • Automatic labeling by scale • Customizable popup menu • Print preview • And much more 	Provides flexibility, ease of use, and rapid application development.
Symbols library	Includes more than 500 map-related symbols.	Improves productivity by providing easy access to commonly used symbols.

Autodesk MapGuide Server

Feature	Description	Benefit
Runs as service under Microsoft® Windows NT®	Scalable, fault-tolerant, 32-bit, multithreaded architecture.	Reliable, proven technology.
Graphical user interface (GUI)-based administrator	Configures start/stop service, log file generation, and resource security.	GUI that is easy to learn and use helps get you up and running quickly.

Autodesk MapGuide 6.5 Features and Benefits Matrix

Feature	Description	Benefit
Mapagent Service	Distributes data requests using remote procedure calls to all online Autodesk MapGuide Servers, performs dynamic load balancing, interfaces with common web servers using standard CGI, NSAPI, and ISAPI.	Connectivity is fast and convenient.
Simultaneous connections	Supports simultaneous connections (parallel or simultaneous queries) to multiple database servers, residing locally or on Unix [®] systems accessible via the network.	Integrates information maintained in multiple departments and locations.
Multiple levels of security	Ensures delivery of your data or application to authorized users only.	Provides flexible control over information distribution.
Scalable	The server supports symmetric multiprocessing (SMP).	Scales to take advantage of multiprocessor architectures.

Utilities and Toolkits

Feature	Description	Benefit
Symbol Manager	Enables you to customize symbols and symbol libraries used in Autodesk MapGuide software. Features include the ability to <ul style="list-style-type: none"> • Control a symbol's insertion point • Load TrueType font libraries as symbols • Control foreground and background colors • Load and assign raster file types to be used as symbols in the map display 	Allows for a full customization of your map symbols to represent your library and workflow, and increases the usability of your applications.
Dynamic Authoring Toolkit	Organize and manipulate an Autodesk MapGuide map (MWF file) as an XML document with .mwx (Map Window XML) as its file extension.	Significantly increases the flexibility of Autodesk MapGuide application development by incorporating dynamic map authoring, including the programmatic generation and composition of new maps or the modification of existing maps and their properties.
SDF Loader	Makes the following formats available to MWF files: ESRI SHP and coverages, MicroStation DGN, MapInfo Interchange Files, Atlas BNA, comma-separated values (CSV), and Autodesk DWG.	Preserves and enhances the value of your existing map data.
Autodesk MapGuide [®] LiteView	The platform-independent viewing solution for Autodesk MapGuide. Deployed as a Java servlet, it serves interactive maps (with pan, zoom, identification, and selection functions) to any browser on any platform.	Ensures that any user on any platform can access designs and maps. Speeds access to information through interactive raster images (PNG format).

Autodesk MapGuide 6.5 Features and Benefits Matrix

Feature	Description	Benefit
SDF Component Toolkit	Toolkit for developing custom applications that read, write, and modify point, line, and polygon data.	Enables end-user data editing for more interactivity, adding value to your existing data.
Raster Workshop	Supports most raster formats: BMP, CALS, FLIC, JPEG, PCX, PNG, TGA, and TIFF. Can serve the georeferenced raster file formats ESRI world files, GeoTiff, GeoSPOT/BIL (ESRI HDR), and MapInfo TAB. Converts images to and from tiled TIFF format, handles image compression and decompression, resamples and manages RIC (raster image catalog) files. Supports bitonal transparency in black-and-white images, allowing several scanned drawings or images to be overlaid on the same vector map or raster image.	Preserves and enhances the value of your existing map data. Enables you to scan nondigital media such as microfilm or paper and rapidly integrate it into presentations without the time and expense of vectorizing. Optimizes web performance and is easy to learn and use.

autodesk[®]

Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903
USA

Autodesk, Autodesk Map, Autodesk MapGuide, Buzzsaw, Design Web Format, and DWF are either registered trademarks or trademarks of Autodesk, Inc., in the USA and other countries. All other brand names, product names, or trademarks belong to their respective holders.

© 2004 Autodesk, Inc. All rights reserved.