

Working with AutoCAD Platform–Based Industry Applications in AutoCAD 2002

On large design projects that involve many specialists, AutoCAD is commonly used along with industry-specific products that are based on AutoCAD 2002. Consider the design and development of a commercial building. Autodesk products are used in every aspect of this scenario—to design the parts that make up the machines that sit in the building that sits on the land that is served by utilities and roads.

All of the applications built using the AutoCAD 2002 foundation share the same DWG file format, making the exchange of design data between applications simple. There are five of these “desktop” products:

- **Autodesk® Architectural Desktop 3.3** (Architectural Desktop) is the model-based design solution for architectural design development and construction documentation. Architectural Desktop allows designers to work in 2D or 3D or to move fluidly between modes as a design evolves.
- **AutoCAD® Mechanical 6** is the AutoCAD for 2D mechanical design and engineering for all manufacturing industries.
- **Autodesk® Mechanical Desktop® 6** (MDT) is the 3D mechanical design product for mechanical engineers, designers, and drafters who prefer to work in the native AutoCAD 2002 environment. MDT unites parametric 3D solid modeling with freeform surfaces and 2D/3D wireframe.

- **Autodesk® Map 5** is the solution for engineers, planners, utility managers, and technicians who require precision mapping and GIS analysis. It allows you to create, maintain, and produce maps and geographic data, integrate multiple data types and file formats, use powerful GIS analysis tools, and perform thematic mapping and direct Oracle database linking as well as filling the client role to Autodesk® GIS Design Server.
- **Autodesk® Land Desktop 3** (Land Desktop) is for land planners, surveyors, civil engineers and designers, drafters, and other professionals who need land development specific features such as COGO, terrain modeling, parcel and alignment manipulation, and annotation functionality. Land Desktop includes the mapping utilities, drawing entity sharing, and other features of Autodesk Map 5.

With this suite of purpose-built applications, Autodesk customers in nearly every industry can capitalize on unmatched productivity and the power of the AutoCAD platform.

In addition to these sophisticated design products, AutoCAD LT® 2002 may be in use by people who need only occasional access to design files. The affordable Volo™ View may also be in use by others for viewing, markup, and printing of DWG design files. Finally, presentation specialists may be using 3D Studio VIZ® software to enhance DWG files with realistic effects while retaining their full design intelligence. A key factor in the success of large projects is the ability of all these applications to handle the same files.

Dealing with Custom Objects

One significant advantage of the AutoCAD platform–based industry applications is their ability to leverage custom objects. For example, Architectural Desktop users can be

much more productive if their design paradigm allows them to create intelligent Walls, Doors, and Windows, instead of simple arcs, lines, circles, and blocks.

If you open files containing custom objects in AutoCAD, you can choose to display Proxy Graphics in place of the actual objects, or load an Object Enabler if one is available.

By enabling the display of Proxy Graphics, AutoCAD 2002 users can still work with any DWG file created by desktop products. You can interact with the drawing and manipulate its content, but not have the ability to edit the custom objects.

However, if an Object Enabler is available, you can install that enabler and view and manipulate custom objects in AutoCAD just like the application that created them.

Autodesk Object Enablers are freely downloadable collaboration utilities that enable other Autodesk products to view and manipulate the enhanced objects from three of the desktop products: Architectural Desktop, Land Desktop, and MDT.

Object Enablers use ObjectDBX™ technology to allow object data created in those three applications to be accessed outside its native environment. This provides essential data accessibility for design teams that create and receive files from these applications.

Once installed, the Object Enablers for AutoCAD Architectural Desktop™ and AutoCAD Land Development Desktop load automatically when you open an AutoCAD drawing that contains architectural or land objects. Your design team can fully view the objects and modify them using familiar AutoCAD commands, thus making collaboration easier and more efficient.

One feature of AutoCAD 2002 is Live Enablers. Live Enablers allow AutoCAD 2002 customers who are connected to Autodesk Point A to automatically download and install

available object enablers whenever custom objects are detected in a DWG file.

AutoCAD 2002 Live Enabler Options

Five options specify how AutoCAD 2002 checks for Object Enablers. You access these options by selecting the following menus: Tools⇒Options⇒System.

Never—Prevents AutoCAD from checking for Object Enablers regardless of your settings in the AutoCAD Today window.

When Autodesk Point A is Available in Today—AutoCAD checks for Object Enablers only if Autodesk Point A is open in the AutoCAD Today window. It is not necessary for the Today window to be open. However, AutoCAD checks for Object Enablers only if a live Internet connection is present.

Always—AutoCAD always checks for Object Enablers regardless of your settings in the AutoCAD Today window.

Maximum Number of Unsuccessful Checks—Specifies the number of times AutoCAD will continue to check for Object Enablers after unsuccessful attempts.

Manually Installing Enablers

You can also download and install object enablers manually in advance of opening DWG files containing custom objects.

Some Object Enablers have two available installers, MSI and EXE. The MSI installer utilizes a smaller setup file, which is quicker to download, but requires a previous installation that used the Microsoft Installation Wizard. The EXE installer utilizes a larger setup file, which takes longer to download but does not require a previous installation that used the Microsoft Installation Wizard. If you download the MSI installer and it does not work for your application, you should download the EXE installer instead.

Available Object Enablers

Object Enabler	Can Be Installed on	Opens Drawings with Objects from
Arch 3.02 OE (EXE and MSI) Last Updated: 3/2/2001	AutoCAD 2000 AutoCAD 2000i AutoCAD 2002 AutoCAD LT 2000i AutoCAD Map® 2000 AutoCAD Map 2000i Autodesk Map 5 AutoCAD® Land Development Desktop 2i AutoCAD Architectural Desktop™ 2i Mechanical Desktop 5 Autodesk Mechanical Desktop 6 Volo View Volo™ View Express 3D Studio VIZ 3 3D Studio VIZ 3i	Autodesk Architectural Desktop 3.3 Autodesk Architectural Desktop 3 AutoCAD Architectural Desktop 2i AutoCAD Architectural Desktop 2 AutoCAD Architectural Desktop 1
Land 2.51i OE (EXE and MSI) Last Updated: 3/2/2001	AutoCAD 2000 AutoCAD 2000i AutoCAD 2002 AutoCAD LT 2000i AutoCAD Map 2000 AutoCAD Map 2000i Autodesk Map 5 AutoCAD Land Development Desktop 2i AutoCAD Architectural Desktop 2i Mechanical Desktop 5 Autodesk Mechanical Desktop 6 Volo View Volo View Express 3D Studio VIZ 3 3D Studio VIZ 3i	AutoCAD Land Development Desktop 2i AutoCAD Land Development Desktop 2 AutoCAD Land Development Desktop 1
Mechanical Desktop 5 OE Last Updated: 11/10/2000	Volo View	Mechanical Desktop 5 Mechanical Desktop 4 Mechanical Desktop 3 Mechanical Desktop 2 Mechanical Desktop 1



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