

AutoCAD®
2009

Features and Benefits

Innovative improvements to the AutoCAD software you know and trust.

With AutoCAD® 2009 software Autodesk has one goal: increasing your productivity. A customizable and extensible user interface has been optimized to boost efficiency by making routine CAD tasks faster and commands easier to find. New timesaving features automate repetitive tasks, helping you move to new highs of productivity.

Autodesk provides a complete set of tools to help designers clearly convey their design vision to clients and then quickly and accurately document that vision so projects are completed on time and within budget. AutoCAD® 2006 software enabled designers to work faster and smarter on a wide range of day-to-day tasks with powerful new drafting features such as Dynamic Blocks and Dynamic Input. AutoCAD 2007 software focused on improving designers' ability to create, navigate, and edit a conceptual design, clearly present the design to a nontechnical audience, and then easily document it using the powerful AutoCAD software drafting tools. AutoCAD 2008 software focused on improving designers' ability to document their designs, with a level of control that helped ensure that their drawings looked as professional as they require.

With AutoCAD 2009 software, Autodesk has started a major redesign of the AutoCAD user interface that subsequent releases will build on. This redesign is based on years of detailed customer feedback and usability testing as well as emerging software standards both inside and outside the company. The new interface has been optimized to make routine CAD tasks faster and less common commands easier to find, and to help new users up and running as quickly as possible.

This Features and Benefits guide outlines the key features of AutoCAD 2009 software by presenting problems designers might encounter and by outlining the solutions provided in AutoCAD 2009. This guide also details the bottom-line benefits of this new release of AutoCAD software.

This guide is not intended to be an exhaustive list of the new AutoCAD 2009 software features. To view a comprehensive list of new features, visit www.autodesk.com/autocad-features.

Autodesk®

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User Interface Overview

The AutoCAD® software interface has been updated and enhanced over many years. The goal of these updates has always been to provide access to the latest software tools and make AutoCAD users as productive as possible. Past examples include tool palettes, for organizing user content such as frequent commands, hatch patterns, and blocks; the Heads-up Design™ concept, which put the power of the command line at the cursor; and the dashboard, a method of optimizing commands for improved workflow. Changing the AutoCAD user interface is a sensitive issue for many users because of high levels of productivity and customization with their current release.

To make the transition from older releases of AutoCAD software as smooth as possible, the new user interface is as customizable and extensible as in the past. All existing user customizations can be migrated forward using the standard migration tools. In addition, AutoCAD 2009 software offers a “classic workspace” that provides access to the traditional toolbar and menu interface. Users can be confident that their transition to AutoCAD 2009 will be smooth and that they will move to new highs of productivity as they integrate the advantages of the new user interface into their existing work practices.

Another key Autodesk initiative is to incorporate common software tools into all Autodesk software products. Many users work with multiple Autodesk products and move between them on a daily basis. The goal over the next several releases of all Autodesk products is to develop a consistent toolset for common operations (for example, file open and close, rotate, pan, and zoom), streamlining the transition between products and reducing learning time.

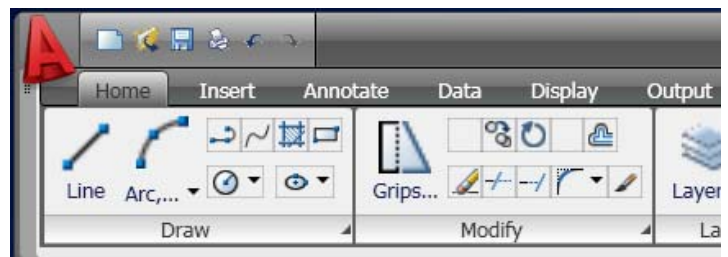
Ribbon

Problem

Based on toolbars and menus, the current AutoCAD® software user interface has evolved over many years and can be confusing for new or infrequent users. There are multiple ways to perform a specific task, and the options to complete a task may be buried in a secondary dialog box. As business applications such as Microsoft® Office move to new interface designs, AutoCAD begins to look outdated.

Solution

The new ribbon interface is the latest task-based application design for AutoCAD software. It presents command options in a concise visual format that enables users to quickly select the appropriate command based on the work they are doing. The ribbon eliminates steps to get to commands and makes it easier to find less-used options so that they are readily available when needed. The ribbon is both customizable and extensible so that users can optimize it to meet their companies' standards.



Benefit

Overall drafting productivity is increased by decreasing the number of steps to reach a command. New users become productive more rapidly. It is easier to move between applications, based on using a common set of interface tools.

ViewCube and SteeringWheels Features

Problem

Solid and surface models require many rapid changes in orientation as they are created and reviewed. The common AutoCAD® software commands to perform this operation are the Orbit and Named View commands. Located in separate menus, these commands can be difficult to find. It is easy to get disoriented after using the Orbit command and to have to go back to a standard view to reorient to the model. In addition, each Autodesk application has a slightly different version of the Orbit command.

Solution

The new ViewCube™ feature provides a single, visually interactive tool to rotate and orient any solid or surface model in AutoCAD. Selecting a face, edge, or corner of the ViewCube tool brings the model itself quickly to that predefined orientation. Clicking and holding the tool enables users to freely rotate the model in any direction. Since it is in a fixed location on the screen, the ViewCube also provides at a glance the overall orientation of the model in space. In addition to providing quick access to the Orbit command, the new SteeringWheels™ tool also provides quick access to the Pan, Center, and Zoom commands. The tool is highly customizable so that users can add walkthrough commands to help create and record a walkthrough of their model.



Benefit

Both of these new tools are much easier to use (even for inexperienced users) than the corresponding commands in earlier releases of the software. They make moving around models and drawings faster and more intuitive.

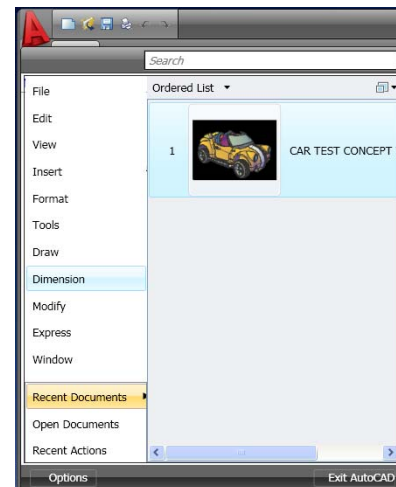
Menu Browser

Problem

The current File Open and File Close commands offer limited functionality and make it difficult to review what files are being opened before actually opening them. This limitation can make working with large numbers of files a tedious and time-consuming process.

Solution

The new menu browser interface enables users to browse through files and examine thumbnail images. Hovering the cursor over the file name provides more detailed information about the file size or file creator. The browser enables users to organize recently used files by name, date, or title. Specific files can be “pinned” so they do not move off the list as additional files are opened.



Benefit

Fast visual review of files improves productivity. Clear organization of files makes working on large projects faster and more efficient. This is a common interface element across multiple Autodesk products

Quick Properties

Problem

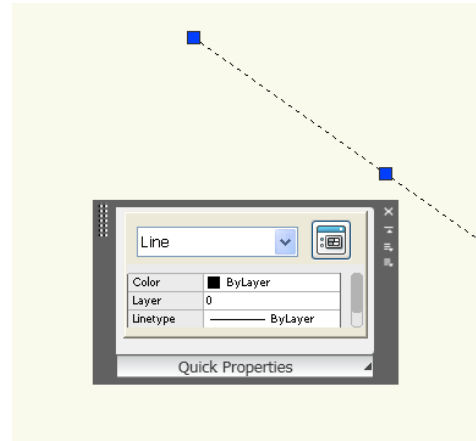
The Properties menu takes up a significant portion of the screen when it is displayed. It also includes huge amounts of information, making it difficult to find and edit key properties.

Solution

The new Quick Properties menu can be displayed by selecting the object that needs to be edited. The default information shown is the most common information needed for that entity. Users can easily customize the menu by selecting the button in the upper-right corner of the menu.

Benefit

Decreasing the number of steps to access properties information boosts productivity. Easy customization helps to ensure that the information presented is optimized for that particular user and project.



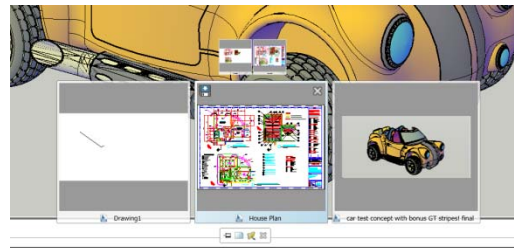
Quick View

Problem

Reviewing open drawings and layouts in drawings is currently done based on drawing and layout names. These names may not clearly convey the content of either the drawing or the layout.

Solution

The new quick view capability enables users to visually review open drawings and their associated layouts through the use of thumbnail images. Associated layouts are displayed as a small set of thumbnails located over the larger drawing file thumbnail. Users can scroll through the drawing file thumbnails at the bottom of the open drawing, using the mouse wheel to dynamically increase or decrease the size of each thumbnail.



Benefit

The use of thumbnails instead of file names makes opening the correct drawing file and layout faster, and decreases time spent opening incorrect drawing files.

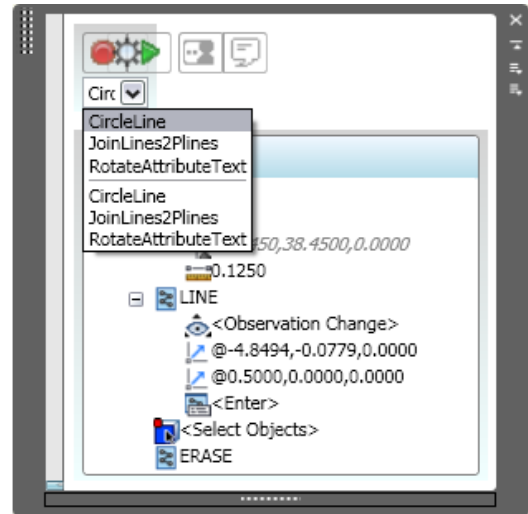
Action Recorder

Problem

AutoCAD® software can use programs created with Microsoft® Visual Basic® development system or LISP to automate repetitive tasks. These custom programs can mean huge productivity enhancements as designs and drawing are created and revised. Unfortunately, creating these types of programs requires sophisticated programming and testing skills and can take significant effort to maintain over time. In larger companies, a CAD manager helps create and manage these types of custom tools.

Solution

The new action recorder tool enables AutoCAD users to quickly record a repetitive task as they perform it. They can then add text messages and requests for input to help streamline processes and quickly select and play back the recorded file when they need to. None of this requires programming or testing skills to execute successfully.



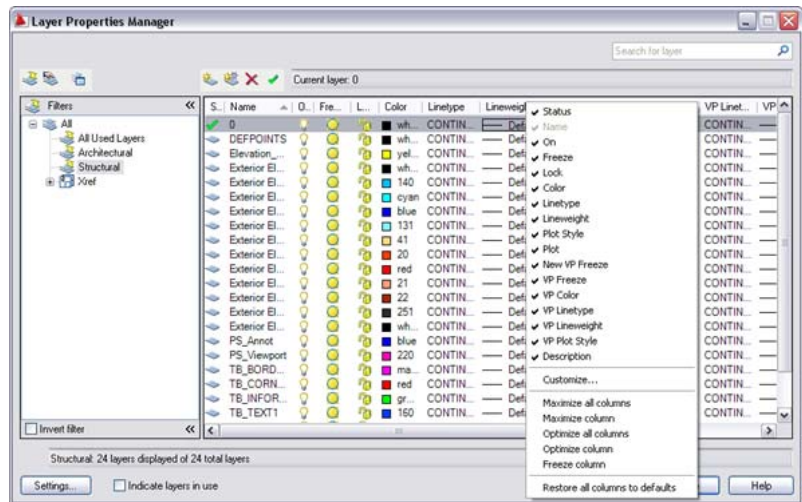
Benefit

The action recorder saves time and increases productivity by automating repetitive tasks without requiring the skills of a professional CAD manager.

Layer Properties Manager

Problem

The Layer Properties Manager in AutoCAD® software is a key tool to manage data in a typical drawing. A company may have a standard for the naming of layers and for what information should reside on each layer. Users move back and forth between layers as they create and edit drawings. In earlier releases of AutoCAD, the Layer Properties dialog box was not interactive with the drawing itself. Changes made in the dialog box were reflected in the drawing only when the user clicked the Accept button. This back-and-forth process could lead to errors and wasted time as changes were made and then corrected based on visual feedback.



Solution

With the new Layer Properties Manager, changes made in the dialog box instantly appear in the drawing. In addition, manipulating the dialog box is easier. Columns can now be individually resized to avoid truncating the contents or title. Individual columns can be fixed in place so that users can scroll through the rest of the columns. And users can reference a column to a fixed column such as the layer name for easy scrolling.

Benefit

The new Layer Properties Manager makes creation and editing of layer properties faster and less prone to error. Changes are instantly reflected in the drawing as they are made in the dialog box.

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