Top 10 Reasons to Choose AutoCAD Raster Design 2010

The Power of AutoCAD **Raster Design**

Extend the power of AutoCAD[®] and AutoCAD-based software with AutoCAD® Raster Design software. Make the most of rasterized scanned drawings, maps, aerial photos, satellite imagery, and digital elevation models. Get more out of your raster data and enhance your designs, plans, presentations, and maps. AutoCAD Raster Design enables you to work in an AutoCAD environment, significantly reducing the need to purchase and learn multiple applications.

Now Is the Time

Take a look at how AutoCAD Raster Design can help you improve your design process.

For more information about AutoCAD Raster Design, go to www.autodesk.com/rasterdesign.

To locate the reseller nearest you, visit www.autodesk.com/reseller.

Discover why so many engineers, designers, and drafters are adding AutoCAD Raster Design to their AutoCAD-based design application.

Minimize Costly Redrafting and Data Entry Time

Convert your scanned paper drawings to vector with interactive and semiautomatic conversion tools. Use dynamic dimensioning and grip editing with vectorization tools to speed up the conversion and verification of raster primitives such as lines, arcs, and circles. Easily convert continuous raster entities into AutoCAD polylines and 3D polylines with vectorization following tools. Create and effectively manage hybrid drawings by converting only the necessary raster geometry, thereby speeding document and drawing revisions and updates. In addition, use optical character recognition (OCR) functionality to recognize machine- and hand-printed text and tables on raster images to create AutoCAD text or multiline text (mtext).

RESULT: Speed project completion by unlocking and making the most of existing scanned engineering drawings, plans, and maps.

Use the Imagery You Require

AutoCAD Raster Design software supports a wide variety of industry-standard file formats, including single-image and multispectral file formats such as CALS, ER Mapper ECW, GIF, JPEG, JPEG 2000, LizardTech[™] MrSID, TGA, TIFF, and more. When used with AutoCAD® Map 3D-based software, AutoCAD Raster Design adds the ability to insert digital elevation models (DEMs), digital orthophoto quadrangle (DOQ), DigitalGlobe[®] QuickBird, ESRI[®] GRID, Landsat FAST-L7A. National Transmission Imagery Format (NITF), and U.S. National Geospatial Agency DTED.

RESULT: Choose from a wider range of image data for use in projects, helping to save time.

Convert and Save Images to Different File Formats Insert images into your AutoCAD-based application in virtually any format and then save the image to your standard format of choice. For instance, saving your images to JPEG 2000 format decreases the size of your files without compromising visual image quality. Standardize your image formats for consistency within your organization.

RESULT: Extend the use of imagery to other applications such as Microsoft[®] Office Word and PowerPoint[®] software.

Edit and Clean Scanned Paper Drawings

Maintain your scanned drawings with easy-to-use raster editing and cleanup tools. Use the Microsoft Paint-like Touchup tool to fill gaps and erase fragments in raster drawings, and use powerful REM (raster entity manipulation) tools, including extend, trim, fillet, and offset, to edit and create raster geometry. Use despeckling, deskewing, and bias correction to clean, straighten, and improve the legibility and quality of scanned drawings.

RESULT: Improve usability and legibility, helping ensure that scanned drawings can be used in future projects.





















Enhance Your Existing Image Archive

Get the most out of your raster data with powerful image processing. Make nonlinear adjustments for brightness and contrast to enhance darker tones while preserving the appearance of midtones and lighter colors, and vice versa. Use the Palette Manager to manipulate individual colors and entire palettes for color images. Select and change a color, combine several color indexes, compress the palette, import and export palettes, and isolate features, such as contours within maps, by turning everything else to the background color.

RESULT: Improve the overall quality of your image archives, so you can get the full benefit from your investment in imagery across the organization.

Send Complete Drawings Including Images

Save bitonal raster images within the DWG[™] file instead of maintaining the image as an external reference. Simplify your document management tasks by maintaining and transporting only one file, avoiding the need to track external image references. The ability to embed or extract images at any point in the process gives you increased flexibility. Note: The receiving AutoCAD-based software needs to have AutoCAD Raster Design, or the free* AutoCAD Raster Design object enabler installed to view embedded images.

RESULT: Easily and reliably send drawings containing images to clients, partners, and agencies.

7 Match Imagery to Your Project

Get the most out of inexpensive imagery that does not contain georeferencing information by rubbersheeting to align aerial photography with your project. When used with AutoCAD Map 3D-based software, AutoCAD Raster Design adds the ability to match georeferenced images to project coordinate systems and to transform images from one coordinate system to another. Georeferenced image support includes:

- DigitalGlobe QuickBird
- DEMs
- DOQ
- ER Mapper ECW
- ESRI GRID
- GeoTIFF
- Landsat FAST-L7A
- LizardTech MrSID
- National Transmission Imagery Format (NITF) version 2.0 and 2.1 satellite imagery
- U.S. National Geospatial Agency DTED (level 0, 1, and 2)

RESULT: Save time and reduce project expenditures by matching existing and low-cost imagery to your project coordinate system.

Analyze Raster Data

Create color elevation representations directly from DEM, DTED (digital terrain elevation model), and ESRI GRID raster files when using AutoCAD Raster Design with AutoCAD Map 3D-based software. Use the data contained in raster images to determine underlying data values for reflectance, elevation, slope, aspect, and current display color values. Show vegetation, land cover, and environmental information using readily available multispectral satellite imagery.

RESULT: Improve design and policy decisions by using low-cost and widely available raster data.

Create High-Quality, Eye-Popping Visuals

Integrate imagery to improve the visual quality of your presentations. When used with AutoCAD Map 3D-based software, AutoCAD Raster Design enables you to create image snapshots and capture color mapping results from DEMs, multispectral imagery, and other images for use in publishing, word processing, presentations, and CAD software.

RESULT: Help your plans and presentations come to life with visuals that have a lasting effect on project decision makers—and your reputation. Extend DEM or multispectral data analysis results for use in applications such as Microsoft Word and PowerPoint[®], and AutoCAD software.

Reap the Benefits of Multiresolution Image Technology

Directly edit multiresolution files such as LizardTech MrSID, ER Mapper ECW, and industry-standard JPEG 2000 formats. Merge images to cover larger areas with a single image. Change image density to handle images more efficiently. Make it easier to use large multispectral images by reducing them to cover just the area you need for your project. Save changes or edits to JPEG 2000 format and retain multiresolution advantages of small file size and fast performance while preserving high visual image quality.

RESULT: Maximize the value of your geospatial imagery investment beyond the geographic information system (GIS) department by using and adapting high-resolution imagery in AutoCAD-based design applications.









*Free products are subject to the terms and conditions of the end-user license agreement that accompanies download of the software.