

Feature Enhancements by Release

Unlock and extend the value of scanned engineering drawings and maps, aerial photos, satellite imagery, and digital elevation models using AutoCAD® Raster Design 2008 software. Raster Design 2008's powerful and intuitive raster tools integrate with applications based on AutoCAD® 2008 software. Clean, edit, or vectorize scanned drawings without expensive redrafting or conversions. Edit, manipulate, and prepare raster data for use in presentation and authoring applications. Incorporate imagery, maps, and scanned drawings into your projects to improve decision making and enhance presentations. Improve the design process, increase your productivity, and get the maximum value from your raster assets using AutoCAD Raster Design.

This document highlights the feature enhancements in AutoCAD Raster Design 2008. For comparison purposes, feature enhancements in AutoCAD Raster Design/CAD Overlay 2000i, 2002, Release 3, 2004, 2005, 2006, and 2007 are also included.

AUTODESK RASTER DESIGN FEATURE ENHANCEMENTS BY RELEASE

AutoCAD Raster Design 2008	
Feature	Function
AutoCAD compatibility	Use with the following AutoCAD 2008–based products: <ul style="list-style-type: none"> • AutoCAD® 2008 • AutoCAD® Civil 3D® 2008 • AutoCAD® Land Desktop 2008 • AutoCAD® Map 3D 2008 • AutoCAD® Architecture 2008 • AutoCAD® MEP 2008 • AutoCAD® Mechanical 2008 • AutoCAD® Electrical 2008
Interoperability	Use AutoCAD Raster Design as the raster data preparation and editing tool to help prepare raster data for display in AutoCAD Map 3D 2008, AutoCAD Civil 3D 2008, and AutoCAD Land Desktop 2008 projects.
Embed Bitonal Images	Ability to embed bitonal images within the drawing file so a single DWG™ file can contain both imagery and design data without using separate image reference files.
Image capture enhancement	Enhanced image capture provides better interoperability with AutoCAD® Map 3D 2008 software. Now image data accessed through the AutoCAD Map 3D FDO raster provider can be edited, processed, analyzed, and saved by Raster Design
Extended image format support	Extended image format support includes insertion of DigitalGlobe QuickBird Tiff and Landsat FAST format imagery.
National Imagery Transmission Format (NITF)	Read support for National Imagery Transmission Format (NITF) version 2.0 and 2.1 satellite imagery produced by the major satellite vendors
VTools enhancements	Addition of dynamic dimensioning and grip editing to VTools to speed the conversion and verification processes.
Edit multiresolution	Ability to directly edit multiresolution files such as LizardTech's MrSID®, ER Mapper's ECW, and industry-standard JPEG 2000 formats. Continue to reap the benefits of multiresolution technology by saving the edits to JPEG 2000 format.
Multiframe images	Support for multiframe images during image insertion. Users can now preview and select which individual frame(s) they want to use for the insertion.
Enhanced insertion	Clearer indication of when image default settings are being applied for any of the image insertion parameters: insertion point, rotation, scale, density, and units. Also, image preview operation has been improved, and more options made available for coordinate transforms.
Despeckle improvements	Despeckle command flow has been streamlined to better enable repeated region operations as well as to eliminate extra prompting.

Autodesk Raster Design 2007	
Feature	Function
AutoCAD compatibility	Use with the following AutoCAD 2007–based products: <ul style="list-style-type: none"> • AutoCAD® 2007 • Autodesk® Civil 3D® 2007

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	<ul style="list-style-type: none"> • Autodesk® Land Desktop 2007 • Autodesk® Civil 3D® – Civil Design Companion 2007 • Autodesk® Survey 2007 • Autodesk Map® 3D 2007 • Autodesk® Architectural Desktop 2007 • Autodesk® Building Systems 2007 • AutoCAD® Mechanical 2007 • Autodesk® Mechanical Desktop® 2007 • AutoCAD® Electrical 2007
Interoperability	Use Autodesk Raster Design as the raster data preparation and editing tool to help prepare raster data for display in Autodesk Map 3D 2007, Civil 3D 2007, and Land Desktop 2007 projects.
Support for ESRI GRID files	Insert both ASCII and binary format ESRI® GRID files into your session.
Read support for DTED format elevation data	Insert DTED (digital terrain elevation model) files for military and other applications.

Autodesk Raster Design 2006	
Feature	Function
AutoCAD compatibility	Support for the AutoCAD 2006–based products.
Image capture	Create a TIFF format “snapshot” of color-mapped imagery at the same insertion point, resolution, and scale as the original.
Transform and edit 16-bit, multispectral imagery and DEMs	Transform multispectral and digital elevation model (DEM) data from their native coordinate systems to yours when you use an Autodesk Map–based AutoCAD platform. Crop these images to conform to your project area. Merge images to cover larger areas with a single image. Change image density to handle images more efficiently.
Save elevation data	Save the result of your edits or coordinate transformations on elevation data in GeoTIFF or DEM format.
Save images in GeoTIFF format	Save multispectral and other images in GeoTIFF format to preserve correlation and coordinate system information outside the AutoCAD environment.
Raster data point query	Retrieve image data values at the pixel level from multispectral imagery, DEMs, and all other image types. Get an interactive readout in one coordinate system even though your project is in another.
Save to JPG 2000	Save your images to industry-standard JPG 2000 format.
Raster entity manipulation (REM)	<p>New raster editing tools:</p> <ul style="list-style-type: none"> • Touch Up tool—Use a “Paint”-like drawing tool with multiple resizable brushes that paints in either foreground or background image color. • Extend, trim, and offset—Extend and trim REM entities to each other as well as to AutoCAD entities. Create offset REM entities from existing raster entities. • Raster entity fillet—Create fillets between REM entities.

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Autodesk Raster Design 2005	
Feature	Function
AutoCAD compatibility	Support for the AutoCAD 2005–based products.
Restructured image management interface	A simple and intuitive graphical environment for managing and displaying complex raster data.
Support for multispectral imagery	Use and analyze multispectral data from sources such as Landsat, IKONOS, and many others. Use color mapping on bands of visual, infrared, and thermal data to show features such as vegetation, minerals, water, urban development, and more in false color.
True Coordinate Transformations by Rubbersheeting	Achieve a greater degree of accuracy as each pixel within the image is correctly transformed to the destination coordinate system.
Support for elevation data	Analyze DEM data for slope and aspect. Use color-mapped DEM files for interpretation and map composition. Export edited DEM files to Autodesk Land Desktop and Autodesk Civil Design.*
Raster image color maps	Represent and analyze raster data in new ways through color mapping. Visualize raster data using false color.
Additional raster data format support	Read and write support for 16-bit TIFF integer, as well as 32- and 64-bit TIFF integer or floating-point files. New reading support.

Autodesk Raster Design 2004	
Feature	Function
AutoCAD compatibility	Support for the AutoCAD 2004–based products.
True color support	Raster Design now takes full advantage of true color support in AutoCAD software.
Installation and configuration	Improved installation technology gives more control over the installation process. Users can now simultaneously install Autodesk Raster Design to multiple installations of AutoCAD or AutoCAD-based products.

Autodesk Raster Design Release 3**	
Feature	Function
Optical Character Recognition (OCR)	OCR feature enables users to convert text or tables in scanned drawings or maps to AutoCAD entities. Convert raster text to AutoCAD Text or AutoCAD mtext.
Tonal adjustment	Tonal Adjustment tab on the Histogram dialog box allows adjustment of image contrast in a nonlinear fashion by using a contrast curve.

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	<p>The contrast curve can be used in three ways:</p> <ul style="list-style-type: none"> • Gamma correction results in an exponential curve. It is defined by either specifying the single exponent (gamma) value or using an interactive slider that in turn determines the gamma value. • Fitted curves are drawn smoothly through points you specify. Points can be added or removed from the curve, or dragged to modify the shape of the curve. • Piecewise linear curves are constructed of points you add or modify, like a fitted curve, but each segment between points is a straight line instead of a curve.
Palette Manager	The Palette Manager feature allows manipulation of individual colors or entire palettes for 8-bit images. Determine which colors are actually being used, change an existing color to a different color, combine several color indices into a single mapped color, compress the palette, and even import and export palettes.
Rubbersheeting	As an adjunct to the existing polynomial methodology the Triangular method guarantees that the imagery is rubbersheeted exactly to the specified control points. Grid selection techniques improve the efficiency of selecting control points by allowing a custom grid of destination points to be created.
Installation and configuration	Improved installation technology gives you more power over the installation process. For instance, you can now simultaneously install to multiple installations of AutoCAD or AutoCAD-based products.

Autodesk CAD Overlay 2002**	
Feature	Function
AutoCAD compatibility	Support for AutoCAD 2002-based products.

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Autodesk CAD Overlay 2000i**	
Feature	Function
Vectorization tools	<p>Vectorization tools in CAD Overlay 2000i allow conversion tasks to be accomplished faster and more efficiently than ever. Vectorization tools recognize the underlying raster geometry and can assist in the construction of a vector model. Vectorization tools effectively verify and adjust geometry so the resulting model is accurate.</p> <p>Primitives: VLine, VPlane, VRect, VCircle, VArc, VText, VMText Followers: VFPlane, VFContour, VF3dPoly</p>
Raster editing	<p>Raster editing features in CAD Overlay 2000i offer greater control over common raster editing tasks and improved productivity and accuracy on projects containing scanned drawings and other raster imagery results.</p> <ul style="list-style-type: none"> • REM (raster entity manipulation) • Region editing for Despeckle, Histogram, and Bitonal filters • Image depth and density • Subregion editing • Despeckle enhancement
New raster format support	<p>Support for multiresolution format data:</p> <ul style="list-style-type: none"> • ECW format (Earth Resource Mapping) • MrSID® format (LizardTech, Inc.)
AutoCAD, desktop, and Internet integration	<p>AutoCAD 2000i is the platform for Internet-driven design, and CAD Overlay 2000i takes advantage of the powerful expanded connectivity when working with imagery. The streamlined integration of CAD Overlay 2000i with AutoCAD and AutoCAD-based products makes it easy to learn and easy to use. If you know AutoCAD, you know CAD Overlay.</p>
File navigation	<p>Redesigned image insert/navigation dialog box allows for a more intuitive user interface and greater functionality, including integrated Internet connectivity. CAD Overlay users need pervasive web connectivity through file navigation to enable extracting and saving raster data across corporate intranet and Internet sites.</p> <ul style="list-style-type: none"> • Web Folders • Image preview and properties • New user interface
Image Manager	<p>Redesigned Image Manager. This dialog box centralizes the location of all functions dealing with image file paths, load status, renaming, erasing, viewing, and modifying image information. The user benefits from a greater understanding and control for all imagery in one streamlined dialog box, designed with both novice and advanced users in mind.</p>
Autodesk Land Desktop integration	<p>CAD Overlay 2000i includes two special features for use with Autodesk Land Desktop:</p> <ul style="list-style-type: none"> • Coordinate input integration • Contour object creation

*Product no longer available for purchase.

**Product no longer available for purchase or customer support.

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