# Image *is* everything.
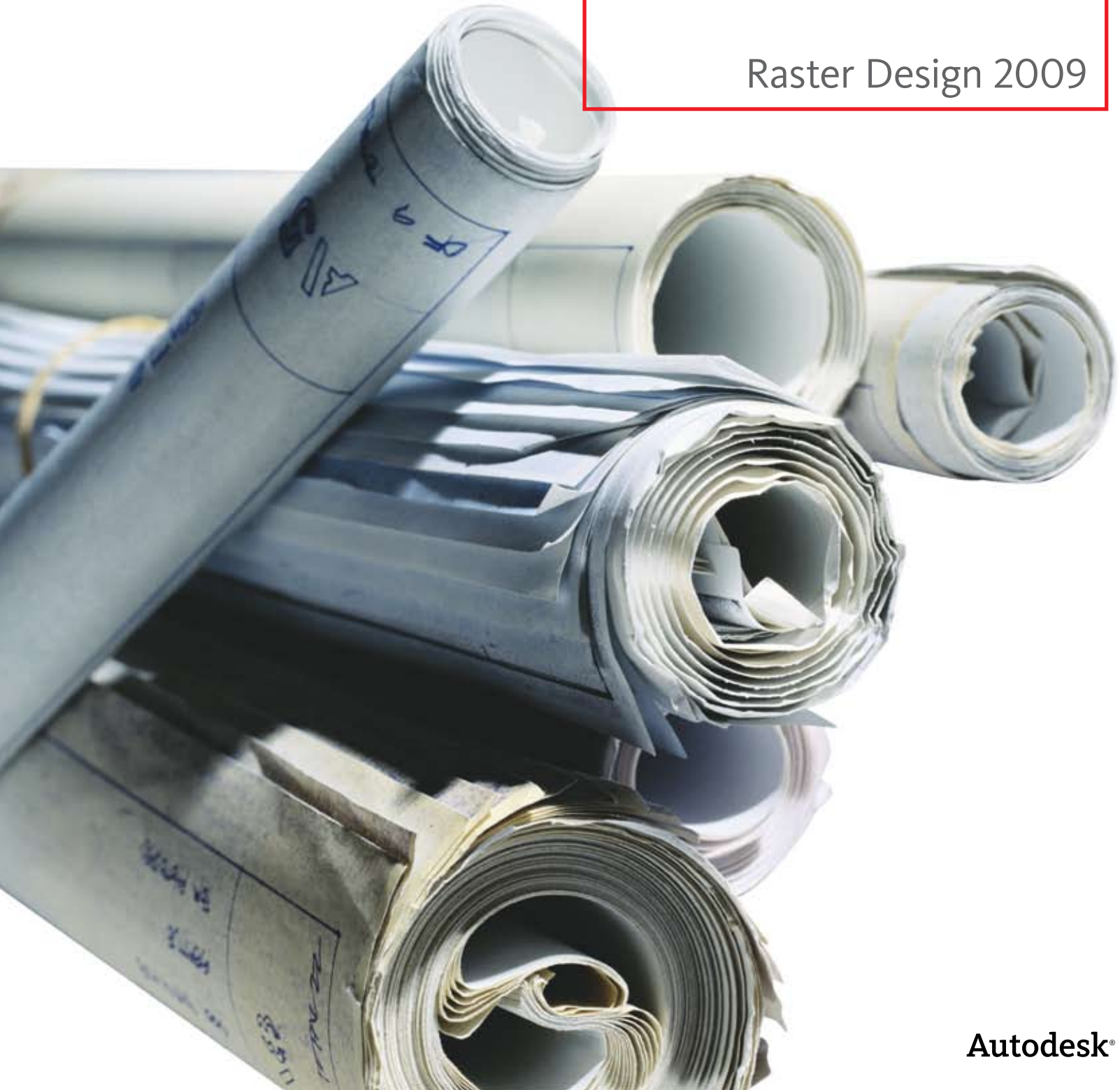
**AutoCAD**®

Raster Design 2009

Autodesk®

# Communication Enhanced

Helping design professionals across a broad range of industries—civil; GIS/mapping; mechanical, electrical, and plumbing (MEP); architectural; and manufacturing—AutoCAD® Raster Design 2009 software extends the power of AutoCAD® and AutoCAD-based products.

> AutoCAD Raster Design allows us to verify the accuracy of our line work against aerial photographs quickly and easily.
>
> —Maynard Myers
>   CAD Technician
>   GCY Incorporated

Improve decision making and enhance communications by using AutoCAD Raster Design software to get the most from raster data, while enhancing designs, plans, presentations, and maps. Raster Design enables you to incorporate and edit information from scanned paper drawings, maps, aerial photos, digital elevation models, satellite imagery, and similar digital design data in projects.

## Extend the Value of Existing Information
Unlock and make the most of existing scanned engineering drawings, plans, and maps by using them in current projects. You can save redrafting time with powerful raster editing and raster-to-vector conversion tools.
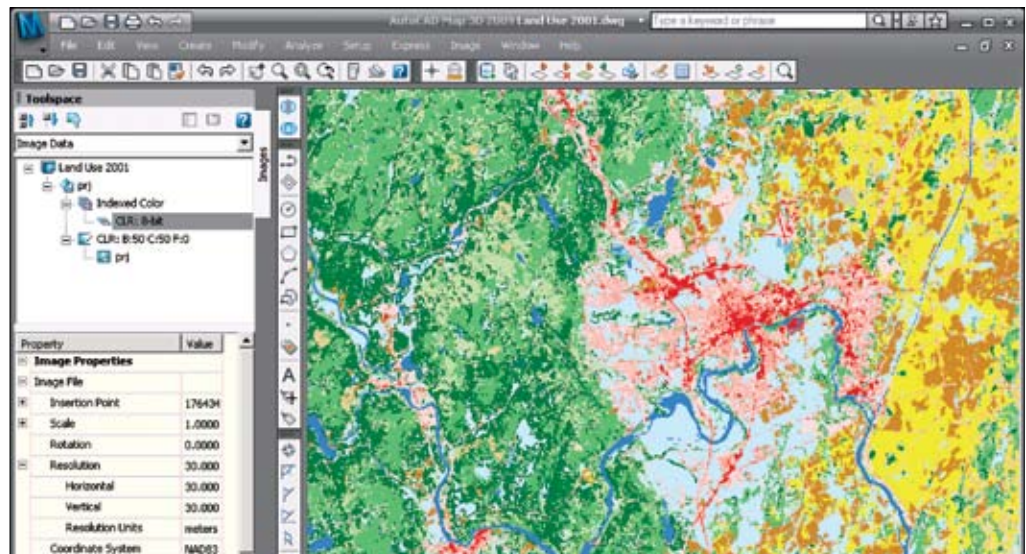
## Improve Decision Making
Get projects approved faster by creating drawings and presenting proposals that integrate information-rich plans, maps, satellite data, and other forms of imagery that enhance communication and understanding of your design intent.

With Raster Design you can create color elevation representations directly from DEM, DTED, and ESRI® GRID raster files. Visualize the slope and aspect information you need to help make better design and policy decisions. Show vegetation, land cover, and environmental information using readily available multispectral satellite imagery.

## Enhance, Preserve, and Maintain Valuable Raster Assets
AutoCAD Raster Design software enables you to easily clean up, provide edits to, and maintain your archive of scanned drawings, plans, and maps. It also enhances and analyzes satellite and aerial imagery in a familiar AutoCAD environment.



Use the discrete themed data handling capabilities of Raster Design to incorporate raster information, such as this indicating land cover from the USGS National Land Cover Database 2001 (NLCD2001).
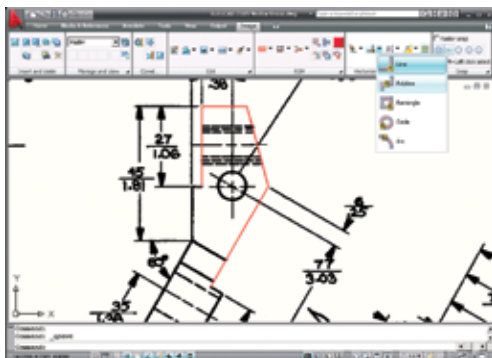
# Approvals Accelerated

Perform raster drawing cleanup, editing and manipulation, raster-to-vector conversion, and image processing while working with a breadth of imagery—from bitonal to high-resolution georeferenced color and multispectral images in a wide range of industry formats.

Raster Design enables you to work in an AutoCAD environment, significantly reducing the need to purchase and learn multiple applications. And by sharing design and analysis findings with a high degree of specificity, Raster Design provides detailed graphical representations that speed project approvals.

### Use Industry-Standard Image Formats

AutoCAD Raster Design supports numerous image formats so designers can easily integrate and use imagery within their projects. Supported multi-resolution image formats include MrSID,® ECW, and JPEG 2000. Read support for DigitalGlobe's Quickbird TIFF and the Landsat FAST-L7A format multispectral imagery provides a broad range of data available within your projects. AutoCAD Raster Design also includes read support for the National Imagery Transmission Format (NITF), which is an important tool for the U.S. Department of Defense and the federal intelligence community. Other supported formats include the following:

| | | |
|---|---|---|
| BMP | CALS | DEM |
| DOQ | ESRI GRID | FLIC |
| GeoSPOT | GeoTIFF | GIF |
| IG4 | JPEG/JFIF | DTED |
| PCX | PICT | PNG |
| RLC | TGA | TIFF |

### Clean Raster Drawings and Images

Improve usability and legibility of scanned drawings with powerful image cleanup tools. Despeckle removes stray pixels that result from scanning dirty or faded drawings or blueprints. Deskew corrects drawings that were crooked as they were fed through a scanner. Bias corrects distortion in an image's aspect ratio. Mirror can correct transparencies that have been scanned upside down. By using these and other tools, you can reduce the time and effort necessary to clean up scanned drawings and maps while better maintaining your image archives.

### Enhance Images with Intuitive Image-Processing Tools

Several image-processing features are available to help designers get the most from existing imagery. The histogram feature includes functions to equalize images, adjust brightness and contrast, convert grayscale or color images to bitonal images, and perform nonlinear tonal adjustments. The convolve feature has smoothing filters to reduce ruggedness and noise as well as sharpening filters to make differences in shading more distinct. The invert feature reverses the light and dark shades of binary, color, and grayscale images. These and other image-processing features in AutoCAD Raster Design can help improve the appearance of existing images, so you can get the full benefit from your investment in imagery.
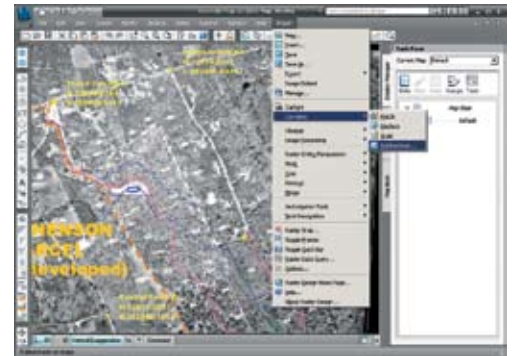
### Convert Raster Data to Vector

Do you want to be able to use scanned drawings and map content without having to redraft? Would you like to convert raster lines, arcs, and text to vector for use in AutoCAD-based products as part of your drawing, model, or design? With AutoCAD Raster Design software's vectorization tools, you can interactively convert raster to vector to accelerate project turnarounds and improve efficiency.

### Use Optical Character Recognition

Recognize machine and hand-printed text and tables on raster images to create AutoCAD text or multiline text (mtext) automatically. Use interactive verification to correct results with dictionary matching. Save manual data entry time and improve accuracy when converting scanned documents with a lot of text.



**Use correlation tools such as Rubbersheet to align images with your drawing's vector information.**



**Accurately vectorize partial or entire scanned sheets using the semiautomatic and interactive raster-to-vector conversion utilities.**

When our customers bring in their old drawings that might have been sitting in a drawer for 30 years, it's safe to say that the quality of the drawings may have degraded from age, water damage, or just plain old dirt. Scans that result from such damaged drawings aren't the highest quality; however, with the powerful suite of tools in Raster Design, including rubbersheeting, despeckling, and others, we can massage the data and make it accurately convey the design intent once again.

—Michael C. Johnson
    CEO
    Advanced Career Development

**Learn More or Purchase**

Access specialists worldwide who can provide product expertise, a deep understanding of your industry, and value that extends beyond your software purchase. To purchase AutoCAD Raster Design software, contact an Autodesk Premier Solutions Provider or Autodesk Authorized Reseller. To locate the reseller nearest you, visit **www.autodesk.com/reseller.**

To learn more about AutoCAD Raster Design, visit **www.autodesk.com/ rasterdesign**.

Looking for high-resolution aerial and satellite imagery as well as vector data for your projects? Visit **www.autodesk.com/geodata.**

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