

# Canvas™ 11

## with GIS+

### What's new in Canvas 11

For professionals who work with technical illustrations and graphics, Canvas 11 provides fully integrated tools to help you create, enhance, and share stunning visual creations. To optimize the workflow process, increase collaboration among colleagues and clients, and help make you more productive in less time, Canvas 11 offers the following functionality and enhancements:

#### ***Secure Canvas files***

Share your Canvas projects with complete confidence. Now when you save your Canvas document, you can use the secure encryption and password protection putting you in control of whether or not documents can be opened.

#### ***New Import filters***

For greater design flexibility, you can now import your digital pictures into Canvas. Use Canvas' image effects and drawing tools to create stunning graphics and then export to a variety of formats. Canvas now includes various RAW image filters, including Canon CR2 & CRW, Kodak DCR, AT&T DJV, Epson ERF, among many others.

#### ***AutoCAD® 2007***

With Canvas' enhanced DXF/DWG import engine, you can now open your 2D and 3D drawings created in AutoCAD 2007.

#### ***Microsoft® Office 2007***

Canvas now supports importing files from Office 2007 products, including Word, PowerPoint, and Excel.

#### ***Adobe® Photoshop® CS***

Your eye-catching designs created in Photoshop CS can be opened in Canvas for reuse in other projects.

#### ***PNG Transparency***

Now when you import or export a PNG file that contains transparency, any transparency in the image is preserved.

#### ***Improved PDF Export***

When exporting your projects to PDF, text exports easier than ever before. Alignment and text merging have both been enhanced.

#### ***Key Object Selection***

When aligning or distributing objects, simply right-click and define a specific object as the key object. All alignment and distribution is done in relation to the key object.

#### ***Tracing Images***

Canvas' Auto Trace filter has been improved to support tracing of not only color and grayscale images, but also black & white. Define the channel, threshold, resolution as well as final color mode and trace type to refine the vector output to your needs.

#### ***Aligning Options***

New options in the Align palette give you greater control over the alignment and distribution of objects. The alignment and distribution references have been separated and you can now align objects in relation to the key selection object or distribute them in relation to their z-order.

## Precision

Create with Confidence - Canvas 11 is designed with a host of tools to ensure that your project is precise—every step of the way.

- Core support for:
  - 2,104 Coordinate Reference Systems (NAD27/UTM Zone 6N, etc.)
  - 67 Operation Methods (Universal Transverse Mercator, Albers Equal Area Conic, etc.)
  - 1,052 Map Projections (Nevada CS27 E, Austria M28, etc.)
  - 302 Geodetic Datums (NAD27, WGS84, AGD66, etc.)
  - 21 Angular units (radian, degree, arc-minute, etc)
  - 45 Linear units (miles, feet, meters, etc., or custom defined)
  - GIS Positioning palette provides accurate feedback to actual latitude/longitude position, including distortion tolerances, and displays Length and Forward Azimuth when measuring between two points.
- As a GIS+ user, you also benefit from the fully integrated precision features available through Canvas 11:
  - Double-floating point, 64-bit coordinate system provides utmost precision
  - Document sizes to 2000 by 2000 miles
  - Various Document Scale methods, such as Fit All Objects to Sheet, Fit Selection to Sheet, Crop & Fit to Sheet, as well as Set Document Scale.
  - Virtually unlimited zoom to +/- 200,000%
  - Two billion object limit per document
  - Two billion control point limit per polygon or Bézier curve.
  - Ruler manager controls document units, document scale settings, page distance to world distance settings, number systems and formats using the 64-bit coordinate system
  - Dimensioning tools are accurate to .5 microns and can be edited and annotated in both metric and English units.
  - Numeric values of a dimension line can be modified with or without affecting the size of the dimension line itself.

## Import

Leverage and convert diverse sources of project information from 80+ supported file formats for maximum flexibility and collaboration.

- Support for most GIS-specific filters including:
  - SHAPE o MapInfo o ARC/INFO o USGS Digital Line Graphs o TIGER (Census) o MrSID o GML (Geography Markup Language) o SDTS (USGS Spatial Data Transfer Standard) o GeoTIFF o GIS Text o Garmin (GPS) o ECW (Enhanced Compressed Wavelet Images) o S57 ( International Hydrographic Organization)
  - Place non-referenced aerial photographs and apply image warp techniques using known coordinates.
  - Map attributes from imported georeferenced files and relational databases can be instantly accessed through the Object Properties palette.
  - Map symbols can be assigned dynamically and enhanced to increase visual appeal through the Symbol Library palette.

Also available are numerous import options that are a standard component of the Canvas 11 core:

- 80+ file import options including among others:
    - DWG/DXF (AutoCAD)
    - CDR (Corel)
    - AI (Adobe Illustrator)
    - CGM (Computer Graphics Metafile)\*
    - PDF (Acrobat)
    - PSD/PDD (Photoshop)
    - TIFF (Tagged Image File)
    - PNG (Portable Network Graphics)
    - EPS (Encapsulated Postscript)
    - PPT (PowerPoint)
    - DICOM
    - RAW (Scientific)
    - RAW (Canon CR2 & CRW, Kodak DCR, AT&T DJV, Epson ERF, etc)
- \* Now compliant with Petroleum Industry Protocol (PIP) and Aviation Transportation Authority (ATA) standards

- Import Scripting Utility—available Windows only—to open documents created in PowerPoint (2000, XP, 2003), Visio 2003, and CorelDraw (11, 12).
- Canvas Print Driver—available Windows XP only—to print everything from complex illustrations, brochures, photographs, or visually rich design projects from other products into Canvas by simply selecting the new Canvas Printer Driver from within any application.

## Visualize & Enhance

Create compelling visuals by assembling, montaging, editing, and annotating your GIS project data.

- Select by Property interface lets you create a project-specific customized query based upon unique properties, values, or other related criteria. A query can be edited to meet new project needs, saved for reuse in another document or shared with colleagues.
- Object Properties, or rather map attributes, that have been assigned to map objects can be viewed, edited, and reapplied. Access this information in a table format via the Object Properties Table View command.
- Label by Property enables you to perform a query and assign text labels to map objects with defined settings (text format, location, rotation angle). Collision detection settings can also be applied or adjusted.
- Statistics by Property displays complete information relating to the total number of map objects on a layer or within a selection.
- Visualize Data lets you modify the appearance of map objects according to a selected property or a query to create thematic and choropleth maps.
- Map symbols can be replaced dynamically and enhanced to increase visual appeal via the Symbol Library palette and Visualize Data command.
- Place or import non-referenced images and apply image warp techniques to create compelling photo overlays.

GIS professionals also benefit from the broad range of visualization tools available through the core of Canvas 11:

- Attributes palette provides one-stop access to all Fill and Stroke Inks (colors, gradients, hatches, textures, symbols and patterns); Pen styles (plain, calligraphic, neon, and parallel); Dash settings, and Arrow styles.
- Presets palette makes it easy to access an extensive array of predefined Fill and Stroke Inks, Pen styles, Dashes, and Arrow styles with one click—or users can define, save, and share their own collections.
- SpriteLayers™ – a unique technology that can be used to quickly apply transparency effects to create fully editable vignettes, ghosted text, or a collage. Both the SpriteLayers effect as well as the original object can be edited at any time.
- SpriteEffects™ – a proprietary Canvas technology that allows image editing filters, such as blur, hue, saturation, or other artistic effects to be easily applied to text, illustrations, or images in multiple layers.
- Align command – any selected group of illustrations, text, or images can be instantly aligned and positioned.
- Combine command –easily create entirely new objects from the intersection of two or more vector objects.
- Direct Edit Selection tool – selecting curve-based objects places them in curve edit mode automatically. Saves time as it eliminates the need to double-click on curves to edit them – plus it supports shift-select of multiple curves.
- Lasso Selection tool – freeform lasso selection of objects, Objects that are intersected with within complex projects with the lasso will be selected. The lasso can be set to lasso only the objects that are completely enclosed.
- Direct Edit Lasso Selection tool – lasso to select discontinuous Bezier curve points for editing.
- Illustration content can be quickly edited via numerous path and point editing commands from the Properties bar and context-sensitive menu including:
  - o Delete multiple selected points on a path
  - o Smooth multiple selected points on a path
  - o Cusp multiple selected points on a path
  - o Fillet multiple selected points on a path
- Annotation tools – instant creation of four different styles of editable labels that can highlight specific areas of interest or concern.
- Page Crop tool – specific sections of a complex illustration project can be cut away and used to visualize a specific component within a defined trimming area.
- Professional image editing features – Canvas has all of the tools needed to create image compositions, retouch photos, or to create custom images.
- Symbol Library palette – search on the clipart DVD for a specific illustration idea. Also you can create and store user-defined dynamic objects and dynamic library object sets (.MCR).
- Trim to Path command lets you create unique image shapes without having to understand clipping paths. No rendering or cropping is necessary.
- Object Path Editor gives full access to the X,Y values or lat/long coordinates of every point in a polygon, Bézier curve or vector object. Values can be imported and exported via text files or the clipboard.
- Replicate and Position command automatically positions objects using X,Y coordinates.

- Path tools – Curve, Polygon, Smooth Polygon, Freehand, Push, Reshape, and AutoCurve tools – make it easy to draw creative illustrations.
- Support for 8, 16, and 32 bit image data per channel/per pixel.

## Share

Adding the GIS+ module to Canvas 11 provides the ability to share projects in various GIS-related formats including:

- GeoTIFF
- SHAPE
- GIS Text
- GeoJPEG
- ECW

Plus, because the GIS+ module is fully integrated with Canvas, you also save time by sharing your project information in a variety of cost-effective formats including: PDF, Web content, print and presentations.

- Customizable PDF export with the following options:
  - o Secure encryption
  - o Resolution, compression, and color mode
  - o Font embedding to reduce file size and optimize export
  - o Specialized half-tone settings
- Quickly create Web content including:
  - o HTML or XHTML
    - CSS, Table, Centered Table
    - Control over text rendering and anti-aliasing options
    - Document Properties dialog box allows for addition of customized Meta Tags
  - o Web Graphics
    - GIF and JPEG
      - Use up to four preview panes to compare GIF and JPEG images side by side before export
      - EXIF Data – digital photographs retain project-related EXIF data during export.
      - Digital image optimization – all Web-specific options, including anti-aliasing are available during export.
      - Optimize download time by slicing large Web images into small, faster-loading pieces.
      - Web Button tool – engineered to remove the guesswork from creating visually pleasing interactive Dynamic Web buttons.
    - Link Manager – easily assign hyperlinks or protocols to page elements so that they will direct the viewer to Web pages on the Internet, a local file, an FTP address, or an email address. You can also define anchors and assign hyperlinks to them.
    - Pixel Mode – allows for the viewing of images at 72 DPI which assures that graphics created for Web content are being properly viewed during the creation process.
    - Create and export Web banners as FLASH animation (SWF)
- Print Professional Output
  - o Crop and registration marks – can be assigned to guarantee proper output of work.
  - o Interactive Print Preview includes centralized controls for an extensive array of print and page setup settings usually found in multiple dialogs.
  - o Preview color separations – eliminates output errors.
  - o Document creation – multiple column sections, facing pages, master pages, paper orientation, customizable margins, and shared layers are all available as document layout options.
  - o Large format – numerous easy-to-access options for printing of display graphics.
  - o Print to PostScript and PRN files – delivers accurate rendition of all Canvas work for commercial printing.
  - o Set tolerances – bleeds and trap (spread, choke, and overprint) options are integrated into the output features of Canvas.
  - o Auto Correct – an interactive spell checker that underlines spelling errors for correction
  - o Text Repel – images and illustrations placed within a Canvas document can have Text Repel options applied that will force text to smoothly flow around each.
- Seamlessly exchange information with Microsoft Office from the Clipboard via optimized Copy & Paste settings for Word, Excel, and PowerPoint
- Create visually stunning presentations
  - o EXE for Windows
  - o Use dual monitor setup to allow discreet access to speaker notes during a presentation
  - o Transitions – offers speed of transitions options + 19 different effects.
  - o Slide Show palette – instantly select commands such as Fit to Screen, Loop, Show Pointer, Timing of Slide Advance, Progressive Builds and more.

## Interface

Say goodbye to distractions - Canvas' intuitive interface and customizable tool/menu options makes it easy to find what you need.

- Canvas Assistant provides instant context-sensitive access to detailed information surrounding the functionality of all of the drawing, image, and text editing features within Canvas 11.
- Startup Dialog provides instant, one-click access to working documents, new document options, and many of the support and help resources available to registered users
- Properties Bar keeps track of selected objects and tools and displays the most relevant customization options at all times.
- Smart Toolbox instantly displays all tools related to the current tool for easy access. Tool sets can be resized and locked so they are readily available.
- Work faster by assigning keyboard shortcuts and adding customizable menu icons to frequently used commands.
- Attributes palette provides one-stop access to all Fill and Stroke Inks (colors, gradients, hatches, textures, symbols, and patterns); Pen styles (plain, calligraphic, neon, and parallel); Dash settings, and Arrow styles.
- Presets palette makes it easy to access an extensive array of predefined Fill and Stroke Inks, Pen styles, Dashes, and Arrow styles with one click-or users can define, save, and share their own collections.
- Docking Bar provides easy access to palettes, without taking up valuable screen space and can be docked on the left, right, or top.
- Configuration Center handles all program preferences, various tool and command settings from a central location.

## Additional File Formats Supported through Addition of GIS+ Module

Description	Extension	Import	Export
ASCII GIS Shape File	DAT	x	x
GIS Text	TXT	x	x
GPS Garmin Data	TXT	x	
USGS Digital Orthophoto Quadrangle	DOQ	x	
Geo TIFF	TIFF	x	x
USGS Digital Line Graphs	DLG	x	
Enhanced Compressed Wavelet images	ECW	x	x
ARC/INFO interchange file format	E00	x	
BMP with projection information; on export Canvas creates a world	Geo BMP	x	x
GIF with projection information;	Geo GIF	x	x
JPEG with projection information; on export Canvas creates a JGW	Geo JPEG	x	x
PNG with projection information	Geo PNG	x	x
Geography Markup Language	GML	x	
MapInfo interchange format and native format	MIF/TAB	x	
Tiger	RT1	x	
IHO data exchange format	S57	x	
USGS Spatial Data Transfer Standard	SDTS	x	
ESRI GIS Shape File	SHP	x	x
MrSID image format	SID	x	