

New MapViewer Features

General

- **MapViewer** operations can be controlled through an automation language compatible with Visual BASIC.
- [Realtime zoom](#) to quickly zoom to a desired magnification.
- [Pan realtime](#) command allows you to navigate across a map window.
- The [Boundary | Break Curves At Intersections](#) command breaks a selected curve at the intersections with other curves.
- Ability to rotate bitmap and metafile objects, and obtain bitmap or metafile properties by double-clicking on the object.
- Assign a [hyperlink](#) to any object. Once the hyperlink has been created, you can use the **View | Hyperlink** command to scroll across the map window and view object hyperlinks.
- In addition to the primary and secondary IDs, we have added the attribute 1 and attribute 2 object IDs.
- Georeferenced bitmap information can be used in **MapViewer**.
- You can define input units when importing a file with an unknown projection.
- Zoom in and out while tracing an area or curve.
- Create smooth curves and areas in your curve or area objects using the **Draw | Spline Curve** and the **Draw | Spline Area** menu commands.
- The **Boundary | Smooth Boundary** command smoothes selected objects.
- Added bitmap editing tools including [Crop Bitmap](#), [Sharpen](#), [Median Filter](#), [Spatial Filter](#), [Adjust Brightness](#), [Adjust Contrast](#), [Adjust Saturation](#), and [Convert Color Depth](#) commands.

Mapping Changes

- Multi-color spectrums can be defined for [prism map](#) and [hatch map](#) color classes.
- Apply a texture to the tops of prism map areas. The texture can be based on a bitmap or a fill pattern.
- Improved [flow map](#) design establishes line connections between object centroids based on a data value. Flow line style can also be an S shape curve or an arc.
- Added 3D bars for [bar maps](#).
- [Bar map](#) bars with a negative data value can now grow downward based on a user defined base value.
- Various bar map options have been added such as 3D bar thickness, horizontal bars, text lead lines, marked data increments, and stacked bars.
- Added 3D pies for [pie maps](#).
- Added various pie map options, such as 3D pie styles, text lead lines, square root scaling, and the ability to display data text on the outside of the pie.
- Added a new legend style for [flow maps](#).
- [Pin map](#) symbols can be specified for each location based on a data file column.
- New [graticule](#) design allows you to fill a graticule background and place the graticule on a separate layer.
- Improved graticule tick and label appearance and control.
- Standard deviation and [Jenks' Natural Breaks](#) data classification methods have been added for [hatch map](#), [pin map](#), and [prism map](#) classes.
- Density maps can use a symbol from any true type font symbol set for the [density map](#) display.
- Added option to arrange [line graph map](#) data in a descending order and the ability to graph data horizontally.
- Control the size of a prism map based on an XY scaling percentage, and added the option to display only the top edge of prism map areas.
- Create a bitmap from a [prism map](#) with a uniform height value. The resulting bitmap can be used as a [base map](#) layer.
- Prism maps can be created from curve and point objects.
- Pin maps now support units other than latitude and longitude.
- Easily access any thematic map dialog using the **Map | Map Properties** menu command or the  button.
- Create a [Blended Boundary Bitmap](#) from a base map using the **Image | Blended Boundary Bitmap** command.
- Georeferenced bitmaps can be projected.

Spatial Analysis

- Easily find neighboring point locations using the **Analysis | Closest Neighbor** command.
- Display your map [query](#) results as a new map layer, as a new data worksheet, or as a report.
- Include object attribute criteria into your query strings.
- Load query strings to repeat a search, or save a query string for use in the future.
- Added an option to include boundaries partially within a region when using the **Analysis | Records in Regions** command.
- Data statistics and object rank are now included in the [Map Document Report](#).
- The [Analysis | Query Map Data](#) command allows you to query the map data based on data statistics.
- Find an object or multiple objects using the **Edit | Find** and the **Edit | Find Next** commands.

Map Management and Layout

- All map dialogs now contain statistics on the data to be mapped.
- New [legend](#) design permits multiple map layers to be included in a single legend, placement of text to the left of samples, and the ability to arrange samples and variables in a vertical or horizontal fashion.
- Added seven new map [scale bar](#) styles.
- New **Boundary | Redefine Attributes** command allows you to easily define and redefine all object IDs.
- Automatically calculate the optimal projection settings for your map using the *Compute from map limits* option in the **Modify Projection Settings** dialog.
- Map [limits](#) are displayed in the **Map Projection** dialog.
- Define map limits based on any single polygon area.
- Locking map layers eliminate unwanted or unintentional map changes from occurring.
- The [Show theme of hidden object](#) option allows you to turn off thematic map boundary objects, but keep the thematic map information visible.
- Change the scale of your map but keep the same XY proportions using the *Keep current proportion* option in the **Map Scale** dialog.
- The [Object Data Manager](#) has been improved to display data statistics and boundary coordinates for a selected object.
- Control the map graticule visibility in the [Layer Manager](#).
- Map [graticule](#) lines can be spaced in units other than latitude and longitude.

Preferences and Printing

- Additional units have been added to the **File | Preferences** dialog.
- Added a *Do not project bitmaps* option to the **File | Preferences** dialog.
- Zoom to any level and print the current view using the *View* printing method.