<u>Map</u>Viewer[™]

Getting Started Guide

Thematic Mapping and Spatial Analysis Software For Business, Science, and Education



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Introduction to MapViewer

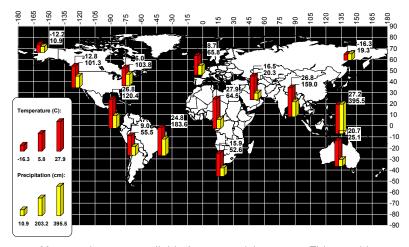
MapViewer is an analytical, thematic mapping program. With thematic maps, data are linked to areas, curves, or points on a map, making it easy for you to visualize data distribution.

Consider the possibilities **MapViewer** gives you. With **MapViewer**, you can define sales territories, outline marketing strategies, view demographic distributions, show ecological distribution, present epidemiological studies, produce geologic maps, teach cartography, or display any geographically distributed data. **MapViewer** helps you present your data in the most informative ways.

Although MapViewer includes a wide variety of boundary files, it is flexible in that it does not limit you to only working with the included boundary files. You can define your own territories by tracing existing boundaries, drawing completely new boundaries, or importing boundaries from files. Then, you can use the data included with MapViewer to produce various types of maps, create your own data file in MapViewer, or import your own data for use with the map.

With **MapViewer**, you can display the following map types: hatch, density, pie, bar, symbol, prism, line graph, flow, gradient, territory, cartogram, contour, vector, and pin maps. In addition, you can post data, add a graticule, create legends, display scale bars, and create map collars. Most maps can be calibrated, scaled, limited in range, and projected. In addition, you can analyze the maps with tools such as queries.

Annual Temperature and Precipitation



Many options are available for customizing maps. This graphic shows a multivariate bar chart, legend, graticule, and text.

System Requirements

The minimum system requirements for MapViewer are:

- Operating system: Windows 2000, XP, or higher
- Monitor resolution: 800 X 600 X 256 colors minimum
- Hard disk: 60 MB for program files and 20 MB for optional sample files
- RAM: at least 128 MB of RAM above the Windows RAM requirement for large resolution bitmaps is recommended

Installation Directions

Golden Software does not recommend installing **MapViewer 7** over any previous version of **MapViewer**. **MapViewer** 1, 2, 3, 4, 5, 6, and 7 can coexist on the same computer as long as they are installed in separate directories. You do not need to have an older version of **MapViewer** installed in order to install **MapViewer 7**.

You need to have administrator rights to install and run MapViewer 7.

To install **MapViewer** from a CD:

- 1. Insert the **MapViewer** CD into the CD-ROM drive. The install program automatically begins on most computers. If the installation does not begin automatically, double-click on the SETUP.EXE file on the CD.
- Choose Install MapViewer from the MapViewer Auto Setup dialog to begin the installation.

To install **MapViewer** from a download:

- 1. Download **MapViewer** according to the directions you received.
- 2. Double-click on the downloaded file to begin the installation process.

For detailed installation directions, such as troubleshooting installations, refer to the README.RTF file or to the FAQs at www.goldensoftware.com.

Updating MapViewer

To update your version of **MapViewer**, open the program and select **Help | Check for Update**.

Do not install a newer FULL version of **MapViewer** over a previous version of **MapViewer 7**. This does not update the software. For example, do not install 7.02 over 7.00. If for some reason you need to do a full installation of **MapViewer 7**, uninstall the previous version before installing the updated version.

Uninstalling MapViewer

To uninstall **MapViewer**, use Add/Remove Programs in the Windows Control Panel. You may be prompted to insert the CD to uninstall the program.

A Note about the Documentation

The MapViewer 7 documentation includes this getting started guide and the online help file. Basic information about each command and feature is included in the online help file. The online help file also includes advanced information such as creating multiple layer maps with multiple thematic elements. Other sources of MapViewer information include our support forum, FAQs, and technical support.

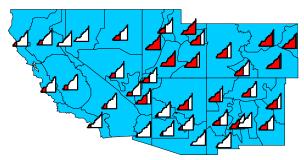
If you prefer printed documentation, the online help file can be printed in part or in full. See *Printing the Online Help* section beginning on page 20 for more information.

Various font styles are used throughout the **MapViewer** documentation. **Bold** text indicates menu commands, dialog names, and page names. *Italic* text indicates items within a dialog such as group box names, options, and field names. For example, the **Import File** dialog contains a *Look in* drop-down list. Bold and italic text may occasionally be used for emphasis.

Also, menu commands appear as **Draw | Text**. This means, "click on the **Draw** menu at the top of the map window, then click on **Text** within the **Draw** menu list." The first word is always the menu name, followed by the commands within the menu list.

What is a Thematic Map?

A thematic map is a way to represent the geographic distribution of data visually. A thematic map shows what data value is associated with a particular map location. The data can be represented for curves. areas, or point locations. Areas, curves, and points are referred to as boundary objects. A common thematic map example is a population map. Relative population could be represented by gradational colors such as blue to red, where blue represents the lowest population and red represents the highest population. This makes it



Line graph maps are an easy way to display the distribution of your data. By looking at an individual line graph, you can see how an object's data value relates to the entire data set.

easy to evaluate the population distribution quickly.

Once you have determined the type of data you want to represent on the map, you need to decide how to show that data. There are many ways to represent data on a thematic map. Data can be represented by color, patterns, scaled symbols, scaled lines, scaled circles, dot densities, prism height, pie charts, bar charts, filled line graphs, bitmap gradients, contour lines, vectors, or by simply posting the data value at the location.

In addition, you can represent two or more map types at one time by using layers. Each layer in **MapViewer** can only contain a single map type. However, by creating two or more layers, you can easily display two or more types of data on a map.

Map Types

Here are the map types available in MapViewer.



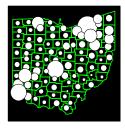
Base Maps

Base maps contain boundaries without any data representation. Boundaries can be areas, curves, and points. Base maps can be used with other maps to show features such as roads, streams, city locations, boundaries that have no data associated with them, and so on. You can overlay base maps on other thematic maps by creating the base map on a separate **MapViewer** layer.



Hatch Maps

Hatch maps use colors to represent classes of data for each area, curve, or point on the map. Hatch maps color code objects based on the data values associated with them. Data values are placed in classes that are defined by data ranges, and one color is associated with each class.



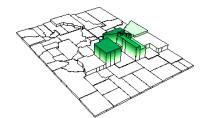
Symbol Maps

Symbol maps place a scaled symbol on an area, curve, or point location on the map. The symbols are scaled in proportion to the data values represented for each boundary object. The larger the symbol, the greater the associated data value.



Density Maps

Density maps, also called dot density maps, use symbols to represent data values for areas on a map. On a density map, each symbol represents some data value, so the number of symbols drawn in an area is in relation to the data value associated with that area. Areas with more symbols have higher associated data values.



Prism Maps

Prism maps draw each area, curve, or point as a raised prism, where the height of the prism is relative to the associated data value. Taller prisms indicate higher data values. Prism maps can be colored using the base map color, with interpolated color between minimum and maximum colors, or based on variable classification.



Pie Maps

Pie maps can be drawn for areas, curves, or points, and are a way to represent several data values by drawing a proportionally sized pie chart for each location. Pie charts show two or more variables where each variable is represented by a proportionally sized slice of the pie. Within a single pie, the size of the slices gives you the relative proportion of the values for that particular area, curve, or point. The entire pie chart is sized in relation to the total of all variables for the boundary object, as compared to the totals of the variables for other boundary objects.



Bar Maps

Bar maps can be drawn for areas, curves, or points, and are a way to represent several data values. Bar charts can show one or more variables where each variable is represented by a proportionally sized bar.



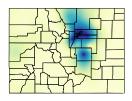
Line Graph Maps

Line graph maps show line graphs of the data at each area, curve, or point location. By looking at a single line graph, you can see how the individual data value relates to the whole data set. The *Graph fill* color represents the data value. Greater graph fill color means a greater data value for the centroid.



Flow Maps

Flow maps scale the width of existing curves on the map or connect the centroids of boundary objects based on starting and ending locations. The curves are scaled in proportion to the data values represented for each curve. The wider the curve, the greater the data value associated with the curve.



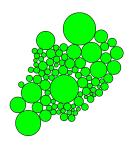
Gradient Maps

Gradient maps display a range of colors based on information from points, curves, and areas. The centroid of an area, all vertices of a curve, and center of a point are used as data point locations and the data value of the area, curve, or point is interpolated onto a grid. The gridded data values are assigned colors based on the selected color spectrum. The resulting map is a smooth color spectrum between the original data.



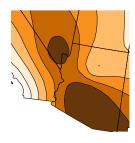
Territory Maps

Territory maps allow areas, curves, or points to be grouped into territories by defining a grid, by hand selecting the areas for territories, or based on a linked data value. All objects within a territory are displayed with the same color. Statistical information about the objects' associated data is available in the **Territory Manager**.



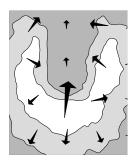
Cartogram Maps

Cartogram maps display data by varying the size of the associated area object. There are two types of cartograms in **MapViewer** - the Dorling cartogram and the non-contiguous cartogram. In a Dorling cartogram, the boundary objects are replaced with circles, whose size depends on the data. In a non-contiguous cartogram, the original shapes are maintained, but their sizes change.



Contour Maps

Contour maps use data associated with areas, curves, or points and interpolate the data to create an evenly-spaced grid. Contour maps display the grid as lines of constant variable values. The area between the lines can be filled with a solid or patterned color.



Vector Maps

Vector maps use data associated with areas, curves, or points and interpolate the data to create an evenly-spaced grid. Vector maps display arrows that show the direction and magnitude of the steepest slope at locations within the grid.



Post Data

Post data simply posts the data value at the location on the map. This is effective because you know the exact value at each location. Post maps do not give a visual representation of the distribution of data. You can combine post maps with other maps by using different layers. For example, you could post data on top of a hatch map. This way you can have an effective visual display of data (the hatch map) and show the exact data value at each location (the post map).



Pin Maps

Pin maps draw points at particular locations on a map. Pin maps can be used to show locations, post labels, or display data values. Pin map point locations are based on XY locations, such as longitude/latitude, US 5-digit ZIP codes, or city/state names. Pin maps can also use colors and symbols to represent classes of data. In addition, pin maps can be converted to other thematic maps such as symbol maps, pie maps, or bar maps.

How MapViewer Works

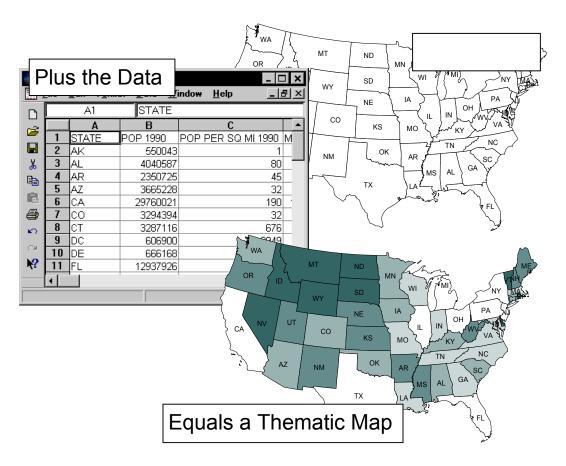
To create a thematic map in **MapViewer**, you need both a base map containing boundary objects and a data file containing the data you want to represent on the map. With these two components, you can create any of the thematic map types.

Base maps consist of areas, curves, and points. Areas, curves, and points are also called boundaries or boundary objects. Areas are closed shapes that can display some type of fill property. Curves are a connected set of XY coordinate positions forming either straight or curved lines. Points consist of a symbol marking an XY coordinate position.

MapViewer thematic maps link data to areas, curves, or points on maps. Areas, curves, and points are linked to data by using what we call primary IDs. A primary ID (PID) is a unique identifier associated with each area, curve, or point to be represented on the thematic map. This primary ID is also found in the corresponding data.

The data contains the primary IDs and the information for each area, curve, or point you would like to represent graphically on a map. The data rows contain the primary ID and the variables (data) for a single boundary object on the map. Each row contains the specific data values for the linked object and each column contains the different data variables. For example, column A in your data file could list the primary IDs for each area on the map, and column C might list population values for all the objects on your map.

The graphic shown here illustrates the relationship between map boundaries and worksheet data. Notice that the primary IDs are displayed for all areas on the map and are contained in column A of the worksheet portion shown.



This graphic illustrates the relationship between the base map and the data when creating a thematic map in <code>MapViewer</code>. Each map area (the states) shows the primary ID (the two letter state designation). These primary IDs are also contained in column A of the data file shown here. The data are linked to the areas on the map to create the population hatch map shown in this example.

Introduction to Data

The data to be represented on a **MapViewer** map needs to be in column and row format. Each row is devoted to a single area, curve, or point on the map. The row of data is linked to the boundary object by its primary ID. When you create a thematic map, you are prompted to choose the variable to be displayed. The columns contain the different variables, or data values, to be represented on the map.

The example below shows a typical data layout that would be effective in **MapViewer**. Notice that row 1 contains column headings. These names are useful for identifying the data contained in each column. The variable names are displayed in the map window dialogs to assist in selecting the variable to be represented on a thematic map. If there are no text entries in row 1, the column letters (Column A, Column B, etc.) are used in the dialogs instead.

	Column A	Column B	Column C	Column D
Row 1	Primary ID	Secondary ID	Population	Sales in Dollars
Row 2	Jackson	MO	343,033	34,867
Row 3	Franklin	MO	563,198	56,798
Row 4	Adams	MO	435,667	47,653

The primary ID can be text or numbers. These primary IDs are also assigned to the areas, curves, or points on a map. For the example above, the primary IDs Jackson, Franklin, and Adams would be associated with objects on the map. These primary IDs link the data to the corresponding boundary objects.

The following example is a portion of a typical **MapViewer** data file where the FIPS code is used as the primary ID. This information is similar to the U.S. state data files included with **MapViewer**, although there are several more columns of data included in the **MapViewer** data files in the SAMPLES folder under the main **MapViewer** folder.

	Column A	Column B	Column C	Column D
Row 1	FIPS Code	Area Name	Land Area	Population
Row 2	02010	Aleutian Islands, AK	10890	8000
Row 3	02020	Anchorage, AK	1732	235000
Row 4	02050	Bethel, AK	36104	12100
Row 5	02060	Bristol Bay, AK	531	1200

Boundary Types

There are three types of boundary objects in <code>MapViewer</code>: areas, curves, or points. You can draw these types of objects with the <code>MapViewer</code> drawing tools or you can import files that contain these types of boundaries using the <code>File | Import</code> or <code>Map | Base Map</code> commands. <code>MapViewer</code> includes a number of boundary files in the SAMPLES folder under the main <code>MapViewer</code> folder. Additional boundary files are located on the <code>MapViewer</code> CDs or can be downloaded from our web site.

You can assign a primary ID used to link the boundary to data in a file, as well as three other IDs (secondary ID, attribute 1, and attribute 2) that can be used as additional identifiers for the object. You can also assign hyperlinks to link your data to additional information.

Areas

Areas, also referred to as polygons, are closed boundaries. The beginning and ending points for the boundary are identical, forming a closed shape. Areas can be used to represent data on almost any type of thematic map. Areas can be assigned fill colors, fill pattern, and line style. Areas can be drawn by selecting the **Draw** | **Area**

command, clicking the Draw | Spline

Area command, or by clicking the button.



Curves

Curves, also called polylines, are lines drawn on a map to show features such as roads or streams. Curves can be linked to data on all map types except for density maps. With maps such as bar maps, the thematic map object is placed on the curve's centroid (midpoint). Curves can be drawn by selecting the **Draw** | **Curve** command, clicking the

button, using the **Draw | Spline Curve** command, or

by clicking the button.

Areas need a minimum of three line segments. The vertices are shown as squares in this drawing. The first and last vertices overlap, closing the area.

Points

Points show XY coordinate locations on a map and are represented by a symbol. Points can be used to represent data all map types except for density maps. Points can be placed on a map using the Map | Pin Map command, using the Draw | Point

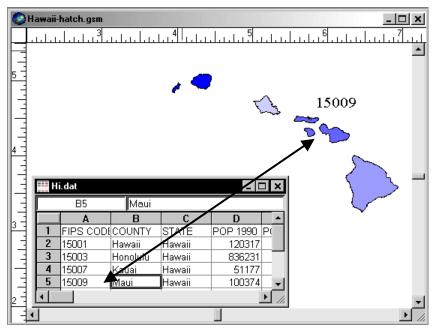
command, or clicking the button.

Other Shapes

Objects such as rectangles, rounded rectangles, squares, circles, ellipses, and text are not **MapViewer** boundaries so you cannot link data to these types of features. You can add these types of objects to any type of map as decorative features or you can use these objects to highlight regions on a map. However, if you need to use a rectangle, rounded rectangle, square, circle, or ellipse as a boundary; draw the shape, select it, and then use the **Boundary | Change Boundary Type | Symmetric Shape to Area** command to convert it into an area boundary object.

Linking Data to Boundaries - The Primary ID

A primary ID (PID) is an identifier used by **MapViewer** as a link between a boundary object (area, curve, and point) and data. Every boundary object in **MapViewer** can have a primary ID. The primary ID for a selected object is displayed in the status bar at the bottom of the **MapViewer** window and in the **Object Manager**.



The primary ID must be associated with the area on the map and appear in the data to form a link between the areas and the data.

The illustration on the previous page shows the correspondence between the primary ID on the map and the primary ID in the data. In this example, as with all the U.S. county areas and county data files included with **MapViewer**, the primary ID is the county FIPS Code.

Primary IDs must match exactly between the boundaries on the map and the primary ID column in the data. **MapViewer** ignores leading or trailing spaces in a primary ID, but any other character is considered part of the primary ID. When there is not an exact match, data is not represented for that area, curve, or point on the map. If none of the primary IDs match between the data and boundaries, you will receive an error message when trying to produce a thematic map, indicating that there is insufficient data to produce the map. In this case, you should verify that the boundary primary IDs and the data primary IDs match exactly.

If you create your own boundaries for a map, select a boundary and assign a primary ID in the **Property Inspector** or enter it into the **Object Manager**. After you have assigned all primary IDs for all the boundaries on your map, you can choose the **File** | **Worksheet** command and a worksheet window is opened with all your primary IDs in column A of the worksheet. If you have a data file that already contains the primary IDs, you can use the **File** | **Load Data** command to import your data file.

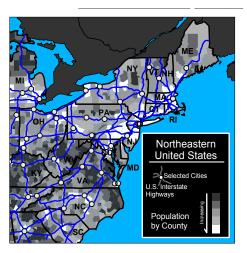
Map Layers

Layers partition a map into one or more overlays. Layers are like transparencies in that you can see all layers at the same time. Layers also let you isolate objects by placing them on separate layers. Layers are created and manipulated in the **Layer Manager**.

Tips on Using Layers

You can accomplish several things when you use layers in **MapViewer**. These are a few tips and tricks we can share that might help you use layers.

- If you want to move a map on the page, use the Map | Move/ Size All Layers command. This moves all objects on all layers simultaneously.
- When copying a multi-layer map to the clipboard, use the Edit | Copy All Layers command. This copies all objects on all layers simultaneously.



A map with many layers can contain a lot of information. This map has seven layers, including a hatch map, base map, pin map, and background layer.

- Use "NONE" for the fill type on areas on top layers. Otherwise, objects on lower layers can be obscured.
- Use layer names to easily keep track of what you have included on each layer.
- Use layers to isolate different types of objects. It is easier to select and modify objects when you do not have too many objects on a single layer.
- Hatch maps work best on the bottom layer, or a layer near the bottom, since most hatch fills obscure any maps on lower layers.



Layers are helpful when showing different borders for boundaries and for showing different scale maps.

- Make a map with different thematic maps on different layers. This way, you can display different data variables on a "single" map. For example, you could show a hatch map on one layer and a scaled symbol map on another layer.
- Use layers to emphasize particular boundaries. An example is to have two layers, one with the county outlines and one with the state outlines. In this situation, you can place the state boundaries on a top layer and use no fill for the states. Then give the states a heavy line style relative to the county boundaries.

Active Layer

Only one layer can be active at a time and most commands only apply to the active layer. This means objects on other layers remain unaffected by any changes you make on the active layer. However, some commands do apply to all layers at the same time.

The commands that apply to all layers are:

- Edit | Copy All Layers copies all objects on all map layers.
- Map | Move/ Size All Layers moves all objects on all layers at the same time.
- Map | Convert Projection converts the projection across all map layers.
- Map | Scale scales the boundary objects on all layers.
- Map | Calibration converts the coordinates for all objects on all layers.
- File | Export exports all objects on all layers, unless otherwise specified.

One Thematic Map per Layer

Each layer may contain a single thematic map and have only one data file associated with the layer. By using more than one layer, you can combine different map types to make multivariate thematic maps. For example, you could draw a scaled symbol map over the top of a hatch map to show two different variables.

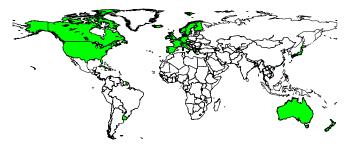
Analyzing Maps

When you create a thematic map or pin map, you have a number of tools available to obtain information from the map. Most of these commands are located in the **Analysis** menu. For example, you could create a hatch map of world population. Next, you could run a query (**Analysis** | **Query**) on the map to determine which countries have populations greater than 1,000,000. Finally, you could view all of the data records for



You can create multivariate maps with different map types by using layers.

countries having populations greater than 1,000,000 with **View | Boundary Records**.



The query [Life Expectancy 1997] > 75, shows life expectancy greater than age 75 in 1997. The query action was to show only those countries that met the query criteria. The outlines of the other countries are shown as a base map on a separate layer.

Starting MapViewer

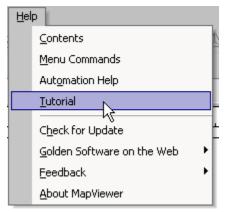
To begin a MapViewer session:

- 1. Click on the Windows Start button.
- 2. Navigate to Golden Software MapViewer 7 and then click MapViewer 7.
- 3. MapViewer starts with a new empty map window. This is the work area where you can produce maps. If this is the first time that you have opened MapViewer, you will be prompted for your serial number. Your serial number is located inside the front cover of the getting started guide. If you purchased MapViewer with the download only option, the serial number was e-mailed to you with the download directions.

Tutorial

The tutorial is designed to introduce you to some of MapViewer's basic features. After you have completed the tutorial, you should be able to begin creating your own maps. We strongly encourage completing the tutorial before proceeding with MapViewer 7, even if you have used previous versions of the program. To open the tutorial, go to Help | Tutorial in MapViewer. If you prefer a printed tutorial, see the *Printing One Section* on page 21.

If you find you still have questions after you have completed the tutorial, you should consider reviewing the material in **MapViewer's** extensive online help file. However, if you still have questions, do not hesitate to contact Golden Software's technical support. We are happy to answer your questions before they become problems.



Click the **Help** menu and then click **Tutorial** to open the tutorial. You can also select **Help** | **Contents** to access the tutorial.

Creating and Editing Maps

Thematic maps show both location and value. This requires that you have boundaries on a map, data associated with the boundaries, and matching primary IDs between the boundaries (areas, curves, and points) and the data file. See *Linking Data to Boundaries - The Primary ID* on page 12 for more information on primary IDs and linking data.

In general terms, to make a thematic map in MapViewer, you must:

- 1. Import a boundary map.
- 2. Specify the data file to use with the map.
- 3. Indicate the location of the primary ID in the data file.
- 4. Indicate the variable column containing the data you want to portray on the map.

Creating Thematic Maps

The procedure for creating thematic maps is essentially the same for all thematic map types. Therefore, the procedure for creating a hatch map is the same as the procedure for creating a prism map, etc. As an example, let's make a hatch map of Ohio population.

- 1. In a new map window, choose the Map | Thematic Maps | Hatch Map command or click the hatch map button . The Import Boundary File dialog is displayed prompting you to select the boundary file to use for the map. Browse to the SAMPLES folder and double-click the OH2000.GSB file.
- 2. The **Import Options** dialog appears so you can select IDs for the boundary file. The *Create PID* box should be checked and the ID should be *Primary*. Checking the rest of the boxes is optional. Click the *OK* button.
- 3. Next, the Open Data File dialog is displayed. Double-click the OH2000.DAT file.
- 4. The **Hatch Map** dialog is displayed. Verify that the *PID* (primary ID) column is set to the correct column in the data file, in this case, Column A: FIPS CODE. This column in the data file matches the primary ID selected for the boundaries in the **Import Options** dialog.
- 5. Select Column C: POP 2000 from the Variable list.
- 6. Click the OK button and a hatch map of Ohio population is created.

Switching to Another Map Type

Switching to another map type is quite simple. Since the boundary and data files are already loaded, you can select a new map type and the available information is reused. Choose the new map type (such as the Map | Thematic Maps | Density Map command) to display the dialog for the map type. Click the *OK* button in the map properties dialog and the new map showing population in the new map style is displayed.

Changing the Map Properties

To make changes to the map after it is created, you can open the map properties by:

- choosing the map type from the Map menu,
- clicking the appropriate map button,
- selecting the Map | Map Properties command,
- clicking the button,
- or double-clicking on the map itself.

The dialog for that map type is displayed after using one of the methods listed above. For example, you can change the *Variable* column to display different data on your map or you can change the data file used to create the map through the dialog. Any changes you make are applied to the map when you click the dialog's *OK* or *Apply* button.

Adding More Boundaries to Your Map

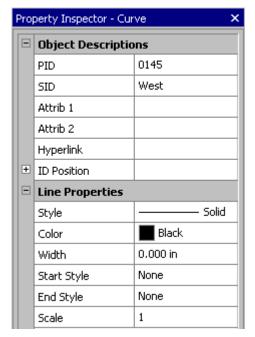
After you have created a thematic map, you can add boundaries to the existing map. The boundaries are included as part of the thematic map if they have the appropriate link to data. When you import new boundaries to the map, you should use the *Append image* option in the **Import Boundary Files** dialog. This assures that the incoming boundaries and the existing boundaries are drawn in the correct relative positions. If you do not want the boundaries to be appended, you can switch off the *Append image* option and the incoming boundaries are drawn as if the window is empty and are scaled to fit the page without regard for the existing boundaries.

You can also draw additional boundaries and add primary IDs to these boundaries. After a boundary is drawn, add a primary ID is added by typing it into the **Object Manager** or **Property Inspector**.

Managers

There are several managers available in **MapViewer 7**. The managers can remain open, making it simple to edit the map window contents and obtain information about the map.

- The Data Manager displays data or statistics associated with a selected object.
- The Coordinates Manager displays the selected object's vertex coordinates.
- The Object Manager contains information about all objects on the active layer. Some editing features, such as assigning a primary ID, are available through the Object Manager.
- The Property Inspector is used to view or modify the properties of one or more selected objects. For example, if you would like to edit an existing legend, click on it and then edit the legend's properties in the Property Inspector.
- The Layer Manager controls the map window's layers. Layers can be deleted, arranged, and made visible or invisible in the Layer Manager.
- The Inset Manager is used to create or modify insets – rectangular regions of the page where one or more layers are displayed.
- The Territory Manager is used with territory maps. Information such as the territory name and the number of objects in a territory is included in the Territory Manager. You can also make a territory



Properties, such as line color, are changed in the **Property Inspector**.

active through the **Territory Manager**. This is useful with the **Map | Add to Territory** command.

The online help file contains detailed information about each of these managers.

Changing Properties with the Property Inspector

The **Property Inspector** displays the properties for selected objects. For example, a selected area has line and fill property options. To change a property, click on the property's value and select a new property from the popup box, scroll to a new

number using the buttons, or type new numbers or text and press ENTER on your keyboard. The property access depends on the property type. In the area example.

changing the color requires clicking on the current color and selecting a new color from the color palette, and changing a vector pattern's scale requires typing a new number or scrolling to a new number.

Occasionally, some properties are dependent on your other selections. For example, there is a *Scale* option in the fill properties. This option is disabled (grayed out) unless you have selected a vector fill type as the *Pattern*.

Scripter

Golden Software's **Scripter**TM is a program for developing and running scripts. A script is a text file containing a series of instructions carried out when the script is run. Instructions are written in a Visual BASIC-like programming language.

Scripter offers many features to help you write, edit, and debug scripts. Its features include language syntax coloring, a list of the procedures defined in the script, an object browser for examining procedures available in external objects, a visual dialog editor, break points, single-step execution, a watch window for displaying the values of script variables, and more.

To start **Scripter**, select it from the Windows Start menu. **Scripter** is installed in the same program group as **MapViewer**. If **Scripter** is not present, the installation of **Scripter** may have been skipped when **MapViewer** was installed. You can install **Scripter** from the **MapViewer** CD-ROM or downloaded file. Refer to the README.RTF file for information on the installation process.

Printing the Online Help

The online help topics may be printed. You can print part of the file or the complete file.

Printing One Topic

To print one topic:

- 1. Open the topic you wish to print.
- 2. Click the Print buttor
- 3. If the **Contents** page is open in the help navigation pane, you are prompted to *Print the selected topic* or *Print the selected heading and all subtopics*. Select *Print the selected topic* and then click the *OK* button.

Printing One Section

To print one section using the tutorial for an example:

- 1. Open the online help file by clicking **Help | Contents** in the **MapViewer** window.
- 2. Click the **Contents** page on the left side navigation pane.
- 3. Click on the Tutorial book to expand the book.
- 4. Click on a topic, such as Tutorial Introduction, within the Tutorial book.
- 5. Click the Print button within the help window.
- 6. A prompt appears asking if you would like to Print the selected topic or Print the selected heading and all subtopics. Select Print the selected heading and all subtopics and then click the OK button. All the topics included in the Tutorial book are printed.



Click on a topic name within a book to print the contents of the book.

Printing the Entire Help File

To print all of the topics in the help file table of contents:

- 1. Open the MapViewer 7 book. This is the top-level book in the help file.
- 2. Click on the *Printing the Online Help* topic on the **Contents** page.



- A prompt appears asking if you would like to *Print the selected topic* or *Print the*
- selected heading and all subtopics. Select Print the selected heading and all subtopics and then click the OK button. All the topics included in the help file's table of contents are printed.

WARNING: Printing the entire help file uses over 1500 sheets of letter-sized paper and is very time consuming to print. There is no table of contents or index printed with the file.

Getting Help

The getting started guide is a quick way to learn about the basics in **MapViewer**. There are also other means of help with **MapViewer**.

Online Help

Extensive information about **MapViewer** is located in the online help. Choose **Help** | **Contents** for a hierarchical arrangement of help topics. By clicking on the topic of interest, information regarding the topic appears.

Context-Sensitive Help

MapViewer also contains context-sensitive help. Highlight a menu command, window region, or dialog box, press the F1 key, and help is displayed for the highlighted item. Another way to access context-sensitive help is by clicking on the context-sensitive

help button. After clicking the button, the cursor appears with a ? next to it. Simply select the item for which help is desired with the modified pointer and a help window appears.

In addition, the dialog boxes contain a help button. When you have an open dialog, click the button in the dialog title bar to obtain help for that dialog.

Internet

There are several Web resources available for help.

- Click the Forums button in online help to research a MapViewer question or to post a question.
- You can use the Help | Feedback commands to send a problem report, suggestion, or information request by e-mail.
- You can search the FAQs on our web page at www.goldensoftware.com. Direct links to the FAQs, the main MapViewer product page, and the Golden Software main website are available by selecting Help | Golden Software on the Web.

Technical Support

Golden Software's technical support is free to registered users of Golden Software products. Our technical support staff is trained to help you find answers to your questions quickly and accurately. We are happy to answer any of your questions about any of our products, both before and after your purchase. We also welcome suggestions for improvements to our software and encourage you to contact us with any ideas you may have for adding new features and capabilities to our programs.

Technical support is available Monday through Friday 8:00 AM to 5:00 PM Mountain Time, excluding major United States holidays. We respond to e-mail and fax technical questions within one business day. When contacting us with your question, have the following information available:

- Your MapViewer serial number (located inside the front cover of the getting started guide or in Help | About MapViewer)
- Your MapViewer version number, found in Help | About MapViewer
- The operating system you are using (Windows 2000 or XP)
- The exact wording of any error messages that appear

Contact Information

Telephone: 303-279-1021

Fax: 303-279-0909

E-mail: mapviewersupport@goldensoftware.com

Web: www.goldensoftware.com (includes FAQs and support forum)

Mail: Golden Software, Inc., 809 14th Street, Golden, Colorado, 80401-1866, USA

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