



# Objective View Map Editor

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This chapter describes the Objective View Map Editor and provides information about configuring maps.

This chapter includes the following sections:

- [Introduction](#)
- [Configuring Map Books and Pages, page 8-4](#)
- [Configuring Layers, page 8-7](#)
- [Configuring Symbols, page 8-9](#)
- [Configuring Entities, page 8-23](#)
- [Configuring Styles, page 8-26](#)
- [Using the Access Control List, page 8-30.](#)

## Introduction

The Objective View Map Editor allows you to create interactive, graphical representations of your network topologies that can be viewed in the Objective View Desktop tool. The interactive maps represent and reflect the status of the network.

The following sections contain some useful terminology and concepts for configuring maps.

## Map Books and Pages

A map book is a collection of Map pages. Map books are created in the Objective View Map Editor and used by the Objective View. All objective views start with a map book.

Map pages have unique names and contain the visible parts of an Objective View map.

For information about creating and editing map books and pages, see [Configuring Map Books and Pages, page 8-4](#).

## Layers

Layers enable you to separate different objects on a Map page. For example, you may create one layer containing only a background image over which your network elements are placed. A second layer may contain symbols for the network elements, and a third may contain text labels for those symbols. You can then select and move, for example, the text labels without disturbing the positions of the symbols.

The default Map page is made up of three layers; however, you can create any number of layers.

For information about configuring layers, see [Configuring Layers, page 8-7](#).

## Symbols

Each layer of a Map page can contain any number of symbols. A symbol is a graphical representation of a network element. There are three major groups of symbols:

- drawn
- image
- link.

For information about creating and editing symbols, see [Configuring Symbols, page 8-9](#).

### Drawn Symbols

A drawn symbol can be:

- a circle
- an ellipse
- a line
- a rectangle
- a round-cornered rectangle
- text.

### Image Symbols

An image symbol is a rectangular area filled with a bitmap image. This is typically used for icons or background images.

### Link Symbols

A link symbol is a line which links two other symbols. This is used to represent an interconnection between two network elements.

## Symbol Properties

A symbol can carry one or more of the following attributes:

- an association with a style
- an association with an entity

- a position
- text for labelling
- a double-click action
- a setting to define how the symbol displays status.

## Symbol Groups

Symbols can be grouped together and manipulated as a single symbol. A symbol group cannot be associated with an entity.

## Entities

Entities are used for deriving the status of network elements being monitored by Cisco Info Center. There are two forms of entities:

- Filtered
- Dependent.

Entities are shared between all Map pages and layers. For information about creating entities, see [Configuring Entities, page 8-23](#).

## Styles

Styles are used to define the visual appearance of symbols. A style defines color, line drawing style, and fill colors. Each style has a name. Styles are shared between all Map pages and layers.

For information about configuring styles, [Configuring Styles, page 8-26](#).

## Symbols and Styles

Each symbol can be associated with a named style to define most of its visual appearance. If no style is associated with a symbol, the Default style is used.

The feedback option in the Symbol Inspector window defines the way in which a symbol graphically displays its status.

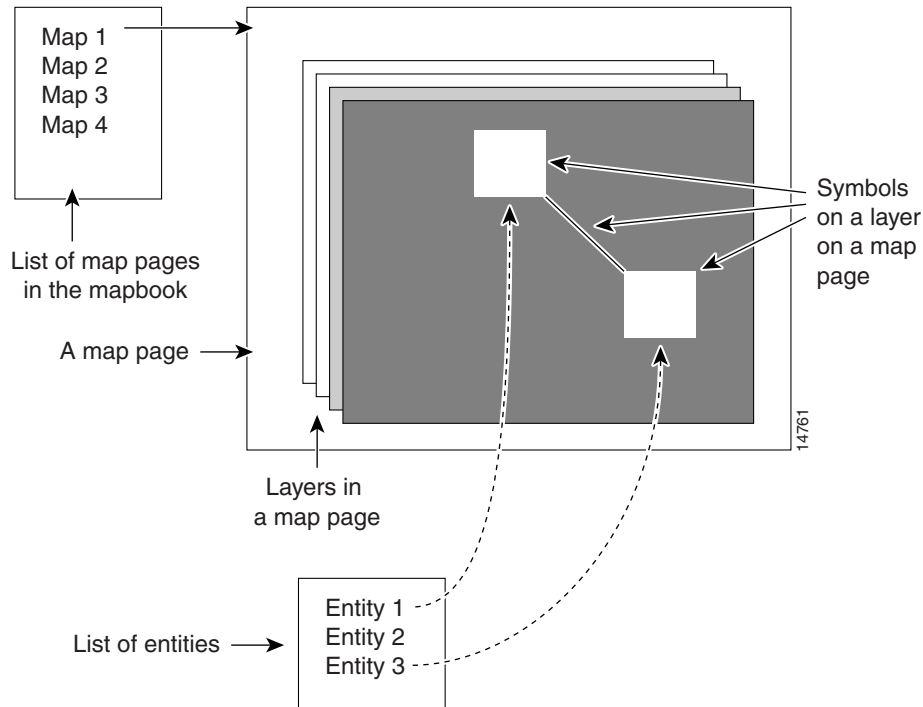
## Actions

One of the properties of a symbol is its action. This defines what happens when you double-click the symbol.

## Relationship Between Maps, Layers, Symbols, and Entities

Figure 8-1 shows the relationship between maps, layers, symbols, and entities.

**Figure 8-1 Relationship Between Maps, Layers, Symbols, and Entities**



In the Objective View Map Editor, the entities are not evaluated so there is no status display. It is only in the Objective View the evaluation takes place.

## Configuring Map Books and Pages

This section describes how to use the Objective View Map Editor to create and edit map books and pages.

### Starting the Objective View Map Editor

You can start the Objective View Map Editor using the following methods:

- select the **Map Editor** button in the Conductor
- from an existing map, move the mouse pointer over a map icon in the Conductor; then, right-click and choose **Start Map Editor**.
- enter the following on the command line:  
`$OMNIHOME/bin/nco_ove &`

The Objective View Map Editor is shown in Figure 8-2.

Figure 8-2 Objective View Map Editor



## Creating a New Map Book

To create a new map book, from the Objective View Map Editor, choose **File > New**. This displays an empty Objective View Map Editor. You can then name the book and create new Map pages.

## Opening a Map Book

To load a map book from the Objective View Map Editor:

- 
- Step 1** Choose **File > Open**.  
A file selection window appears.
  - Step 2** Select a map book file to load.  
Map book files are identified by the file name extension **.map**.
- 

## Creating a New Map Page

From the Objective View Map Editor, click the **Create** button. Use the Create Map Page window to create the new Map page.

## Editing a Map Page

To edit a Map page from the Objective View Map Editor, double-click the Map page in the list. The Map Page Editor window appears.

Map page windows are described in [Map Page Window, page 8-6](#).

## Deleting a Map Page

To delete a page from the map book, from the Objective View Map Editor, select the Map page in the list, then click the **Delete** button.

## Renaming a Map Page

To rename a Map page from the Objective View Map Editor:

- 
- Step 1** Select the Map page to rename.
  - Step 2** Click the **Rename** button.
- Use the Rename Page window to rename the Map page.
- 

## Saving Map Books

To save a map book, from the Objective View Map Editor, choose **File > Save**.

If you are saving a new map book, a file selection window appears allowing you to enter a file name. The file name is displayed in the Title bar of the Objective View Map Editor. If the Title bar displays [None] as the file name, this option operates as the **File > Save As** option.

The **File > Save As** option displays a file selection window and allows you to select a directory and file name to save the map book.

**Note**

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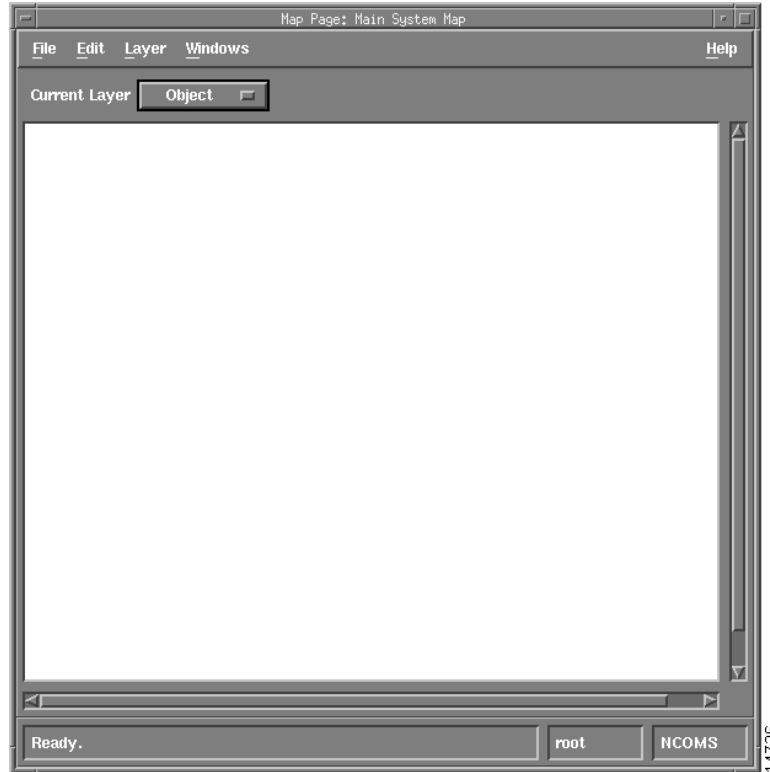
Map book file names must end with the file name extension **.map**.

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## Map Page Window

The Map Page window is where a Map page can be manipulated and edited. Layers can be created, renamed, and deleted. Symbols can then be added, positioned, modified, associated with entities and styles, or deleted on those layers.

The Map Page window is shown in [Figure 8-3](#).

**Figure 8-3** Map Page Window

## Map Page Window Menu Bar

The Map Page window has the following menus: **File**, **Edit**, **Layer**, **Windows**, and **Help**. A **Tools** menu may or may not be active. When active, it shows an administrator-defined menu of tools.

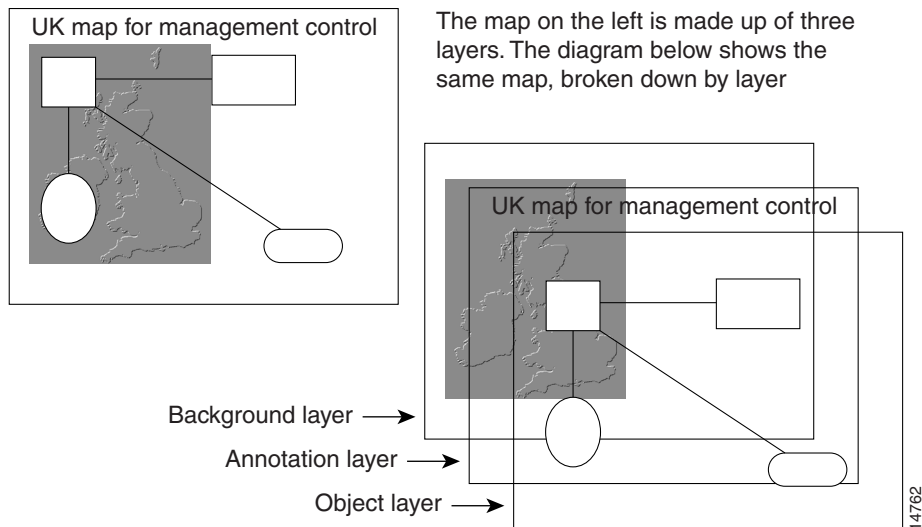
## Configuring Layers

When a Map page is created, it is given three default layers. It is suggested you use these three layers for their recommended purposes and add extra layers, if required. The default layers are:

- Object layer—use for symbols. This is the front layer, by default.
- Annotation layer—use for text and other annotations
- Background—use for background images and maps.

[Figure 8-4](#) shows an example Map page and how it is broken down into the three default layers.

Figure 8-4 Default Map Page Layers



## Creating and Managing Layers

To create and manage layers, on the Map Page window, choose **Layer > Edit**. As shown in [Figure 8-4](#), you can do the following from the Layers window.

Table 8-1 Using the Layers Window

Function	Action
Create a new layer	Click the <b>Create</b> button. A window appears prompting for the new layer name. Enter the name, then click <b>OK</b> .
Delete a layer	Select the layer in the layer list, then click <b>Destroy</b> . All symbols on the layer are deleted with the layer.
Rename a layer	Select the layer in the layer list, then click <b>Rename</b> . A window appears prompting for the new layer name. Enter the new name, then click <b>OK</b> .
Move a layer	Select the layer in the layer list, then click the <b>Move Up</b> and <b>Move Down</b> buttons to move the layer up and down the list, respectively.  The order of the list sets the layer stacking order when displayed at the same time. A layer higher up in the list appears on top of the layers below it.

### Current Layer Button

The **Current Layer** button in the Map Page window shows which layer is currently in use for selection and editing. You can click this button to select another layer to work on.

# Configuring Symbols

A symbol is a graphical representation of a network element that appears on the Objective View. This section contains information about creating and manipulating symbols.

## Using the Symbol Palette

The Symbol Palette window is used for creating symbols on any layer. To display it, from the Map Page window, choose **Windows > Symbol Palette**.

The symbol palette contains the symbols that can be created on a layer. There may be more symbols on the palette than in the above example. These extra symbols appear if there are classes defined in the Cisco Info Center system. The extra class symbols are functionally the same as the Image symbol except they have a pre-defined icon. The Image symbol is used for creating bitmap symbols.



**Note**

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For information about creating classes see [Classes, page 3-29](#).

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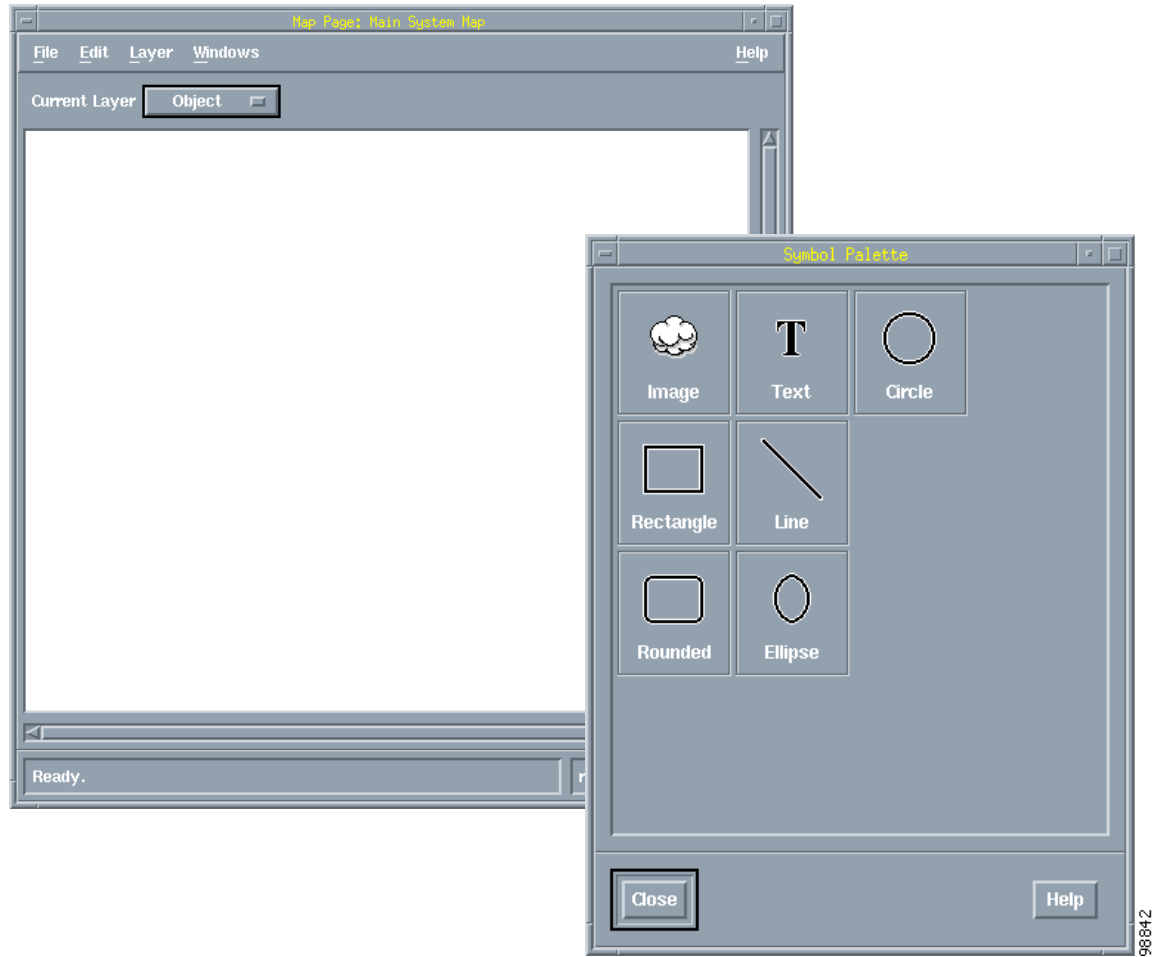
## Creating Symbols on the Current Layer

To create a symbol on the current layer:

- 
- Step 1** Move the mouse pointer to the appropriate symbol in the symbol palette and press the middle mouse button.
  - Step 2** Drag the symbol over the map where you wish to place it and release the middle mouse button to drop the symbol at that position.

[Figure 8-5](#) shows the Symbol Palette and Map Page windows.

Figure 8-5 Drag and Drop From the Symbol Palette



## Selecting Symbols

You can select symbols on the currently selected layer. To select a single symbol, click the symbol with the mouse.

To select multiple symbols, do *one* of the following:

- press and hold the *Control* key, then click the symbols to select *or*
- use the mouse to drag a rectangle around the symbols to select.

When a symbol is selected, small squares appear at its corners. You can use these selection markers to change the shape of some symbols. See [Changing the Shape of Symbols](#).

## Changing the Shape of Symbols

When you select a symbol, corner markers appear. You can use the mouse to click and drag these corner markers to change the size of the symbol.

This method works differently for line, text and image symbols, as follows:

- Line symbols show only start and end points when selected. You can drag these start and end points to change the position and length of the line.
- Text symbols show corner markers to indicate the text is selected. The size of the text symbol is derived from the font, which is in turn derived by the symbol's style. See [Using the Symbol Inspector, page 8-15](#) and [Configuring Styles, page 8-26](#) for details on modifying a symbol's style and font.
- Image symbols show the corner markers to indicate the image is selected. The size of the image symbol is derived from the image associated with it.

## Moving Symbols

To move a symbol on the currently selected layer:

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**Step 1** Select the symbol.

See [Selecting Symbols, page 8-10](#).

**Step 2** Click and drag the symbol to a new location in the current layer.

When a number of symbols are selected, the symbols are moved as a group, retaining positions relative to each other.

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## Modifying Symbol Properties

You can change the following symbol properties:

- **Style**
- **Layer**
- **Associated entity**
- **Position**
- **Associated image**
- **Action**
- **Feedback style**

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**Step 1** Right-click the symbol.

A popup menu appears. The title of the popup menu is the type of symbol you are viewing.

**Step 2** Choose **Edit** from the menu.

If the Symbol Inspector window is not already displayed, it appears.

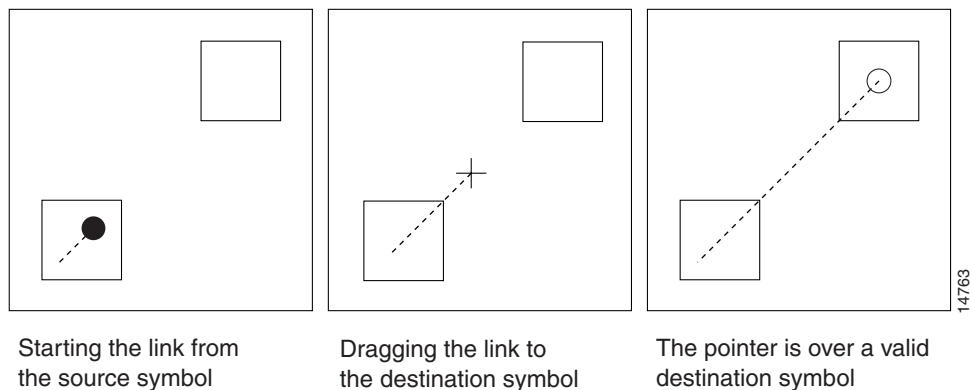
For details on using the *Symbol Inspector* window see [Using the Symbol Inspector, page 8-15](#).

## Creating Link Symbols

A link symbol is a special type of symbol. It is not available on the symbol palette because it only acts as a link between two other symbols. To create a link symbol:

- 
- Step 1** Position the mouse pointer within the first symbol to link (the source symbol).
  - Step 2** Press **Shift** and click the mouse button.  
The pointer changes to a filled circle.
  - Step 3** Drag the pointer to the second (destination) symbol.  
This is shown in [Figure 8-6](#).

**Figure 8-6** Linking Symbols



### Note

When the pointer is over a valid destination symbol, it changes into an unfilled circle. When the pointer is not over a valid symbol it appears as a cross-hair.

- Step 4** Release the mouse button and **Shift** key. The link between the two symbols is created. If either the source or destination symbols are moved, the link moves with them.
- 

## Modifying Link Symbols

You can move link symbols in the same way as line symbols; however, the symbol at the other end of the link is moved as well.

For information about moving symbols, see [Moving Symbols, page 8-11](#).

## Dragging and Dropping Symbols

The Objective View Map Editor allows you to drag and drop symbols within and between Map pages. To drag and drop a symbol:

- 
- Step 1** Click and hold the middle mouse button on a symbol.
  - Step 2** Drag the mouse pointer to another Map page or within the same Map page.
  - Step 3** To drop the symbol, release the mouse button.
- 

## Dragging and Dropping a Group

If you drag and drop a symbol that is part of a group, the operation applies to the entire group.

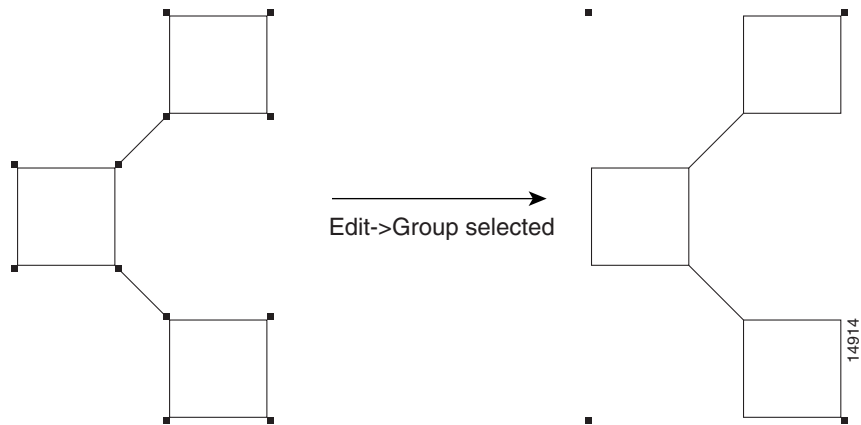
## Using Drag and Drop to Copy a Symbol

To drag a copy of the selected symbol to another location, press the **Control** key while dragging with the middle mouse button.

## Grouping Symbols

You can combine multiple symbols into a single group. A group can be manipulated as a single object. To create a group:

- 
- Step 1** Select the symbols to include in the group.  
See [Selecting Symbols, page 8-10](#).
  - Step 2** Choose **Edit > Group**.  
The symbols are combined into a single group. When you select a group, it is selected as a single object, as shown in [Figure 8-7](#).

**Figure 8-7 Symbol Groups**

## Using Groups

When symbols are grouped, you can no longer access the individual symbol properties that make up the group. The group has its own properties that obscure the properties of the individual symbols.

You can access the group's properties by right-clicking the group and choosing **Edit** from the popup menu.

## Deleting Symbols

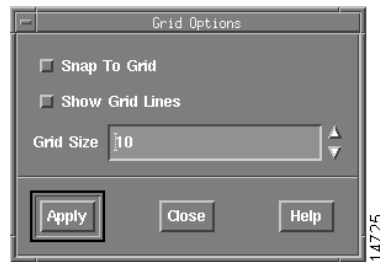
You can delete symbols using the following methods:

- To delete a single symbol, right-click the symbol. A popup menu appears. Choose the **Delete** option from the popup menu.
- To delete multiple symbols, select the symbols, then choose **Edit > Delete** from the menu. All selected symbols are deleted.

For information about selecting multiple symbols, see [Selecting Symbols, page 8-10](#).

## Grid Options

You can use the grid to help you precisely position symbols and other objects on the Map page. Choose **Windows > Grid Options** to display the Grid Options window as shown in [Figure 8-8](#).

**Figure 8-8** Grid Options

You can configure the grid using the following buttons and fields:

- click the **Snap To Grid** button to turn on the snap function. If you move objects, they will snap to the nearest point on the fixed grid.
- click the **Show Grid Lines** button to display the grid lines
- in the **Grid Size** field, enter the spacing between the grid lines.

**Note**

The visual appearance of the grid is determined by the built in style called Grid. See [Configuring Styles, page 8-26](#) for details on how to change the style.

## Using the Symbol Inspector

The Symbol Inspector window allows you to modify the state of a symbol. The following states can be changed:

- **Appearance**
- **Associations**
- **Notes.**

## Displaying the Symbol Inspector

To display the Symbol Inspector window, do *one* of the following:

- choose **Windows > Symbol Inspector** from the Map page menu *or*
- right-click a symbol, then choose **Edit** from the pop-up menu.

## Using the Symbol Inspector

The Symbol Inspector window shows the settings of the currently selected symbol in the Map page. The symbol type is displayed in the top left corner, unless the symbol has a label, in which case it displays the label name.

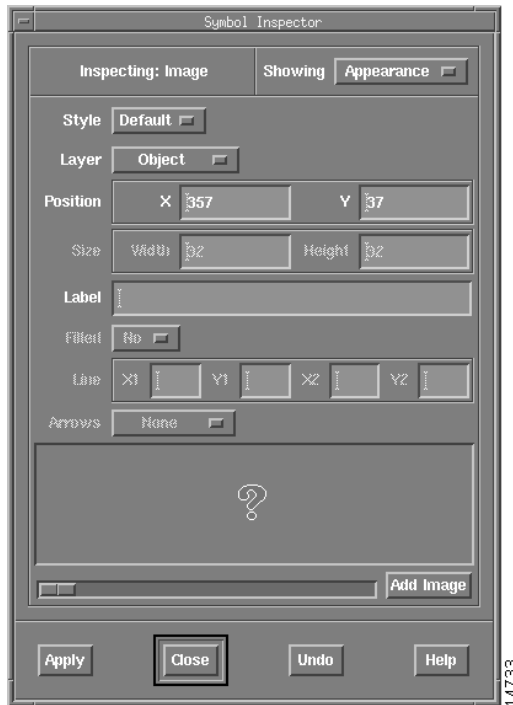
When a symbol is selected, the **Apply** and **Undo** buttons are active. **Apply** sets any changes made in the inspector to the symbol. **Undo** resets the inspector to the state it was in when the symbol was originally selected, or when **Apply** was last pressed (whichever is most recent).

If no symbol is selected, the inspector displays the message Inspecting: Nothing in the top left corner of the inspector. The rest of the Symbol Inspector window is disabled, apart from the **Close** and **Help** buttons.

## Symbol Appearance

To display the visual attributes of the selected symbol, set the Symbol Inspector window **Showing** option button to **Appearance**. An example Symbol Inspector window is shown in [Figure 8-9](#).

**Figure 8-9** Symbol Inspector - Appearance



**Note**

Some of the attributes shown in [Figure 8-9](#) may be disabled because they do not apply to the symbol being examined.

## Symbol Appearance Information

The Symbol Inspector window displays the symbol appearance information in [Table 8-2](#).

**Table 8-2** Symbol Inspector Appearance Fields and Options

Field	Description
<b>Style</b>	The <b>Style</b> option button controls the style with which the symbol is drawn. The styles are edited using the Style Editor window as described in <a href="#">Configuring Styles, page 8-26</a> .
<b>Layer</b>	When a symbol is created, it is placed on the current layer. This layer name is displayed for each symbol in the <b>Layer</b> option button. To move a symbol between layers, select a new layer on the <b>Layer</b> button.
<b>Position</b>	Most symbols have X and Y coordinates to set their position on the Map page. The position may be changed in the Position X and Y fields to fine tune positions on the Map page. This entry is not available for lines and links.

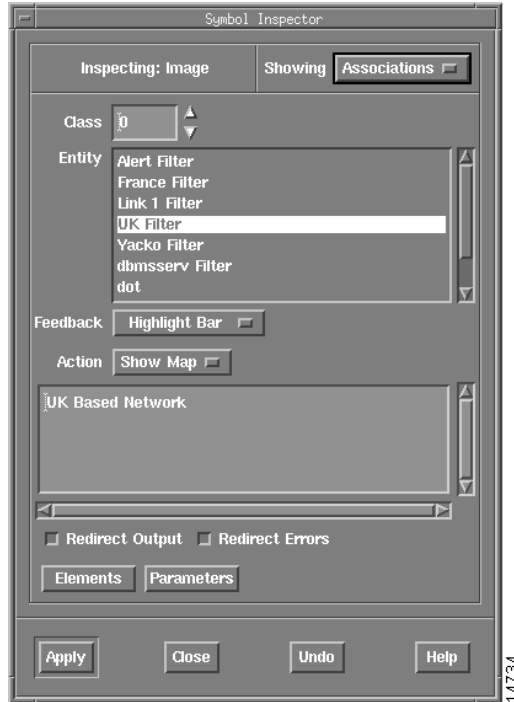
**Table 8-2 Symbol Inspector Appearance Fields and Options (continued)**

<b>Field</b>	<b>Description</b>
<b>Size</b>	Many symbols are defined with the <b>Size</b> , <b>Width</b> , and <b>Height</b> fields, which indicate how wide and tall a symbol is. The <b>Size</b> field is disabled for group, text, image, link, and line symbols, which all derive their size in a different way.
<b>Label</b>	For text symbols the label defines the text string displayed by the symbol. For all other symbols, it defines a text string which appears beneath the symbol as its visual label.
<b>Filled</b>	For rectangle, circle, ellipse, and rounded rectangle symbols, you can fill the symbol with the background color.  Select <b>Yes</b> on the <b>Filled</b> option button to enable the filling option. Select <b>No</b> on the <b>Filled</b> option button to make the symbol transparent.
<b>Line</b>	Line symbols are defined by a start position (X1,Y1) and an end position (X2,Y2). The Line X1, Y1, X2, and Y2 fields allow you to edit the start and end positions. The line option is only available for line symbols.
<b>Arrows</b>	Line and link symbols can have arrows (or other end markers defined by the style) at the ends of the line or link. The <b>Arrows</b> option button allows you to select: <ul style="list-style-type: none"> <li>• <b>None</b> (no arrows)</li> <li>• <b>Source</b> (arrow at the X1,Y1 position)</li> <li>• <b>Destination</b> (arrows at the X2,Y2 position)</li> <li>• <b>Both</b> (arrows at both positions).</li> </ul>
<b>Image</b>	For image symbols, the image selector allows you to select a bitmap image. Move the slider to step through the available images.  If a required image is not preloaded, click the <b>Add Image</b> button to display a list of GIF files present in the <b>\$OMNIHOME/backdrops</b> directory. These are usually large images of maps for backgrounds.  Select one of these images from the list to load it into the image cache, at which point it can be selected using the slider. The image is available to any other image symbol as it is now present in the cache.

## Symbol Associations

To display the entity and action attributes of the selected symbol, set the Symbol Inspector window **Showing** option to **Associations**. The Symbol Inspector window is shown in [Figure 8-10](#).

Figure 8-10 Symbol Inspector - Associations



## Symbol Associations Information

The Symbol Inspector window displays the symbol association information shown in [Table 8-3](#).

**Table 8-3** Symbol Inspector Association Fields and Options

Field	Description
<b>Class</b>	The <b>Class</b> field allows you to select a class value for the symbol. The class determines the tools appearing for the symbol in the Objective View.  Creating menus and classes is covered in <a href="#">Introduction to Process Control, page 7-1</a> .
<b>Entity</b>	You can associate a symbol with an entity by selecting an entity from the list. This entity has a status based on its own association with a filter. In the Objective View, each symbol associated with an entity displays the entity's status. If no entity is selected, the symbol has no status information.  For information about entities, see <a href="#">Entities, page 8-3</a> .

Table 8-3 Symbol Inspector Association Fields and Options (continued)

Field	Description
<b>Feedback</b>	<p>When a symbol is associated with an entity, it needs to display the entity status. The <b>Feedback</b> selector allows you to select the way to display that status. Choose from the following feedback settings:</p> <p><b>Fill Background</b>—the background of the symbol is filled with the status color. For lines and links, <b>Fill Background</b> changes the line/link color. For images, the rectangle behind the image is filled with the status color.</p> <p><b>Highlight Bar</b>—a bar is drawn below the symbol in the status color.</p> <p><b>Outline</b>—for most symbols, the line color of the symbol changes to the status color. For text and image symbols, a box is drawn around the symbol in the status color.</p> <p><b>Overlay Bar</b>—this is similar to <b>Highlight Bar</b> except the bar is drawn over the middle of the symbol. For text symbols, the background color of the text changes to the status color.</p> <p><b>Overlay String</b>—this is similar to <b>Overlay Bar</b> except the string value of the status (for example, <b>Critical</b> or <b>Warning</b>) is drawn over the middle of the symbol. This option operates in the same way as the <b>Overlay Bar</b> option on text, line, or link symbols.</p>
<b>Action</b>	<p>A symbol may have an action associated with it. The <b>Action</b> option button setting determines what the symbol does when you double-click the symbol in the Objective View. Choose from the following action settings:</p> <p><b>Show List</b>—if a symbol is associated with an entity, this displays the currently open Event List with the filter and view of the associated entity.</p> <p>If an Event List is not running, one is started that has no Filter/View bar. Instead, it uses the entity's filter and view settings. This special Event List does not appear in the Monitor box window of the Event List tool.</p> <p><b>Show Map</b>—displays a map. Enter the map name in the <b>Action</b> field below the <b>Action</b> option button. You can use this option to link maps so an entire map book can be easily navigated. See <a href="#">Map Books and Pages, page 8-1</a>.</p> <p><b>Execute</b>—executes an external command. The <b>Action</b> field becomes a command field, as described in <a href="#">Using the Entity Manager, page 8-24</a>.</p> <p><b>None</b>—gives the symbol no action.</p>
<b>Redirect</b>	<p>This option is used in conjunction with the <b>Execute</b> action.</p> <p>The <b>Redirect Output</b> toggle button controls what happens to the output when a command is run. When selected, output is displayed in a read-only window. When not selected, output is discarded.</p> <p>The <b>Redirect Errors</b> toggle button controls what happens to the errors when a command is run. When selected, errors are displayed in a read-only window. When not selected, error messages are discarded.</p>

## Creating Commands for Symbols

When a symbol has an execute action defined, it requires a command. This section contains information about creating:

- simple commands
- commands with elements
- commands with parameters.

To define a command you must have:

- an open Symbol Inspector window with symbol **Associations** displayed
- execute selected as the symbol action.

### Simple Commands

A command may not require any substituted information. For example, if a menu item is required which runs the **xterm** program, the command would be:

**xterm**

Simple commands are ideal for starting local tools.

### Commands with Elements

A command may require extra information while it is running (for example, a password). You can indicate this extra information using a command element.

To insert an element:

---

**Step 1** Move the cursor to the position in the command where you want the information to be inserted.

**Step 2** Click the **Elements** button.

The Command Elements window appears, as shown in [Figure 8-11](#).

**Figure 8-11** *Command Elements Window*



**Step 3** Click the **Type** button at the top of the window to select the type of element to insert.

You can choose from:

- **Internal Variables**
- **Environment Variables**

**Step 4** Select the element to insert, then click **Apply**.

The Elements window stays open, but the appropriate string is inserted into the command string.

**Step 5** Click **Close** to close the Elements window.

## Commands with Parameters

When information is required before starting a command, a parameter must be used. For example, starting a telnet session may require a host name and password. The command in this case would contain two parameters: one for the host name and one for the password.

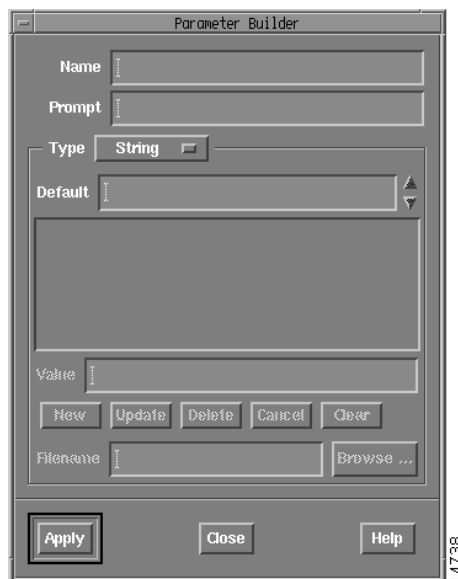
These parameters are gathered before a tool starts running and the information entered is used in the command. To enter a command parameter:

**Step 1** Position the cursor within the **Command** field to where you want the substitution to take place.

**Step 2** Click the **Parameters** button.

The Parameter Builder window appears.

**Figure 8-12** Command Parameters Window



**Step 3** Enter a parameter name in the **Name** field.

**Step 4** Enter the command prompt in the **Prompt** field.

**Step 5** Click the **Type** button to select one of the parameter types shown in [Table 8-4](#).

Table 8-4 Command Parameters

Parameter Type	Description
<b>String</b> <b>Integer</b> <b>Float</b>	For <b>String</b> , <b>Integer</b> , and <b>Float</b> parameters, the only active field is the <b>Default</b> field, which should contain the string which initially appears in the field. The only difference between these three types of parameters is the characters each field accepts. A <b>String</b> parameter takes any character, <b>Integer</b> accepts 0-9, and <b>Float</b> accepts 0-9 and decimal point (.).
<b>Choice</b>	The parameter type allows you to create an option button with a fixed set of options. Select <b>Choice</b> to enable the scrolling list below the <b>Default</b> entry. The <b>Clear</b> button deletes all the entries in the list.
<b>Lookup</b>	The <b>Lookup</b> parameter type works like <b>Choice</b> except instead of entering the choices into the scrolled list, the parameter refers to a file on disk. Each line of this file is used as a choice.  To select the file, enter either the file name in the <b>Filename</b> field or click the <b>Browse</b> button, which brings up a file selection window where you can select the file. This file must be available on the machine running the Desktop tools.
<b>Password</b>	The parameter type operates in the same way as the <b>String</b> type; however, at the prompt, the characters appear as asterisks as you type.

**Step 6** Click **Apply** to insert the parameter.

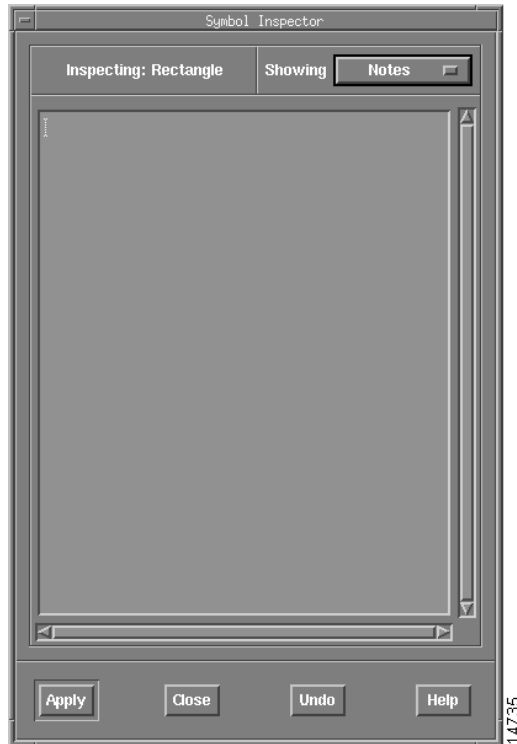
The Parameter Builder window stays open, however, the parameter is inserted into the command string.

**Step 7** Click **Close** to close the Parameter Builder window.

## Notes

To display the note attributes of the selected symbol, set the Symbol Inspector window to **Notes**. An example Symbol Inspector window is shown in [Figure 8-13](#).

Figure 8-13 Symbol Inspector - Notes



A note may be displayed on request inside the Objective View. Enter the required text into the text panel, then click **Apply** to add the note to the symbol.

## Configuring Entities

You can associate entities with symbols so that symbols can display status information about the Objective View. An entity is comprised of two components: a filter and a view.

The filter determines what status information is displayed by symbols associated with the entity. For example, if you want a symbol to display the highest severity alert related to a node named **node1**, you can create an entity with a filter that reads **Node='node1'**. You then associate this entity with a symbol using the Symbol Inspector window. When the symbol is used in the Objective View, it shows the highest severity alert related to **node1**.

For information about symbols and the Symbol Inspector window, see [Configuring Symbols, page 8-9](#).

## Types of Entities

There are two types of entities: *filtered* and *dependent*.

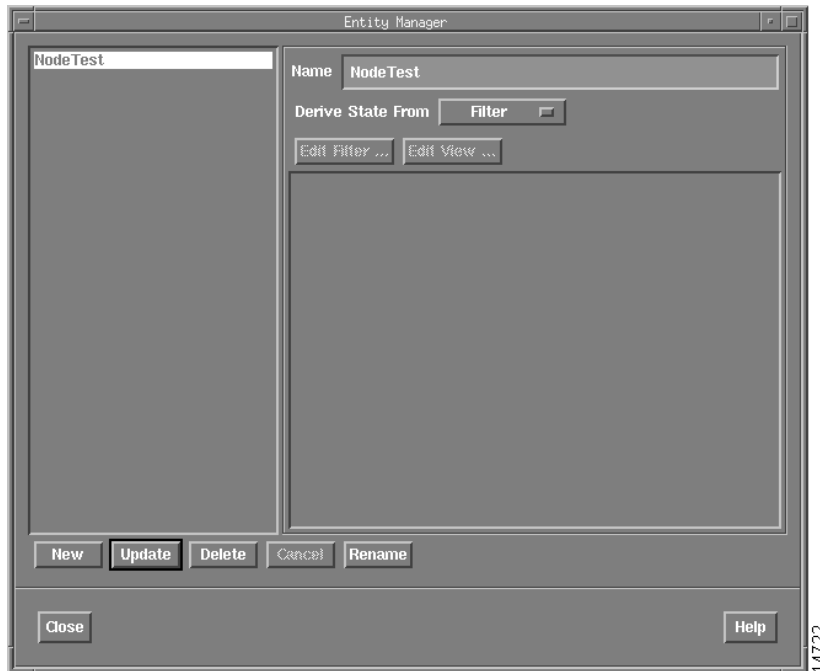
A filtered entity displays the highest alert severity resulting from a filtered interrogation of the **alerts.status** table. The severity color is displayed on an Objective View symbol.

A dependent entity has no filter. Instead, you associate it with multiple filtered entities. It then derives its status from these filtered entities.

## Using the Entity Manager

To create and manage entities, use the Entity Manager window, as shown in [Figure 8-14](#). This is displayed by clicking the **Entity** button in the Objective View Map Editor's main window.

**Figure 8-14** Entity Manager Window



## Creating an Entity

To create an entity:

- 
- Step 1** Click the **New** button.
  - Step 2** Enter the entity name into the **Name** field.  
The **Update** button turns red.
  - Step 3** Click the **Update** button to complete the addition.
  - Step 4** Select the type of entity from the **Derive State From** button.  
The options are:
    - **Filter**, which activates the **Edit Filter** and **Edit View** buttons
    - **Dependants**, which activates the entity dependencies list.

**Step 5** Do *one* of the following:

- If you are *creating a filtered entity*, click the **Edit Filter** button. The Filter Builder window appears. For information about using the filter builder, see the *Cisco Info Center User Guide, 3.6*.
- If you are *creating a dependant entity*, the entity dependencies list shows all other entities as entries. Entries in italics are not used to derive the entity status. Entries in normal text are used. To change any entry in the list, double-click it.

**Note**

When you use the Filter Builder from the Objective View Map Editor, you cannot create subqueries or change the name of the filter.

**Step 6** When you finish entering the entity details, click the **Update** button.

The entity is created. You can now associate symbols with the new entity.

## Modifying an Entity

To modify an entity:

**Step 1** Select the entity in the list.

Its name is displayed in the **Name** field.

**Step 2** You can now change the type of entity, edit the filter or view the filter (for a filter entity), or change the dependency list for a dependent entity.

Any change makes the **Update** button turn red.

**Step 3** Click the **Update** button to apply the changes.

## Renaming an Entity

To rename an entity:

**Step 1** Select the entity in the list.

**Step 2** Click the **Rename** button.

A window appears prompting you for the new name.

**Step 3** Enter the new name, then click **OK**.

The name is then changed.

## Deleting an Entity

To delete an entity, select the entity in the list, then click the **Delete** button.

## Configuring Styles

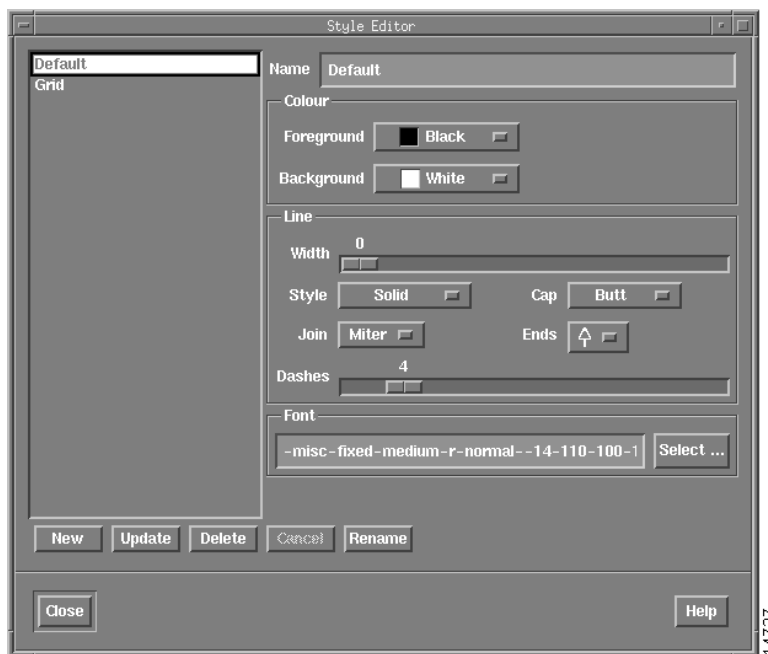
A style defines attributes connected with the appearance of symbols, such as foreground and background colors, line appearance, and fonts. Styles allow symbol appearance to be defined and modified globally.

For information about configuring symbols, see [Configuring Symbols, page 8-9](#).

## Using the Style Editor

To display the Style Editor window, shown in [Figure 8-15](#), click the **Styles** button in the Objective View Map Editor.

**Figure 8-15** Style Editor Window



## Style Color

A style has a foreground and background color. The colors are defined as black, white, and a range of grays. Styles do not allow for other colors because color is used in the Objective View to show severity and highlight symbols. For example, it would be confusing to have a red line highlighted in red.

You can select colors in the Style Editor window using the **Foreground** and **Background** option buttons.

## Style Lines

You can use the Style Editor window to define a style specifically for use with lines in the Objective View.

## Selecting the Line Style Width

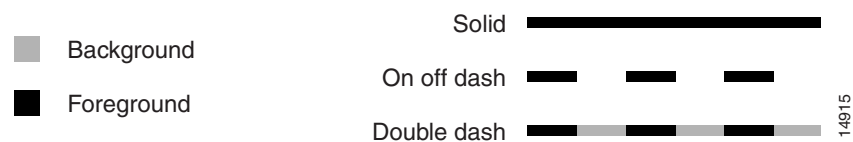
The width of any lines drawn using the style is defined by the **Width** slider, which can range from **0** to **8**.

## Selecting the Line Style Appearance

Select the line appearance using the **Style** option button. There are three line drawing styles, as shown in [Figure 8-16](#):

- *solid* draws a straight line
- *on off dash* draws a dashed line using only the foreground color
- *double dash* draws a dashed line using the foreground and background colors.

**Figure 8-16** Line Styles



When using a dash style, the **Dashes** slider allows you to set the length of the dash from **1** to **25**.

## Selecting the Cap

The **Cap** allows the style to set how a line ends. There are four cap styles:

- **Not Last** stops drawing one pixel short of the end of the line
- **Butt** draws the line right up to the last point
- **Round** puts a rounded end on drawn lines, going past the end of the line by approximately half the width for the line
- **Projecting** overshoots the end of the line and draws a square end.

## Selecting the Join Option

The **Join** option controls how lines in rectangles are joined:

- **Miter** extends the lines to a point
- **Bevel** crops the lines at the end
- **Round** rounds the line.

## Selecting the Line End

Where a line or other symbol is set to have arrows, the **Ends** option button allows you to define the type of arrow to use. The choices include arrows, square ends, and circle ends, both filled and unfilled.

Click the **Ends** button to select the end type. The arrow types are shown in [Figure 8-17](#).

Figure 8-17 Arrow Types



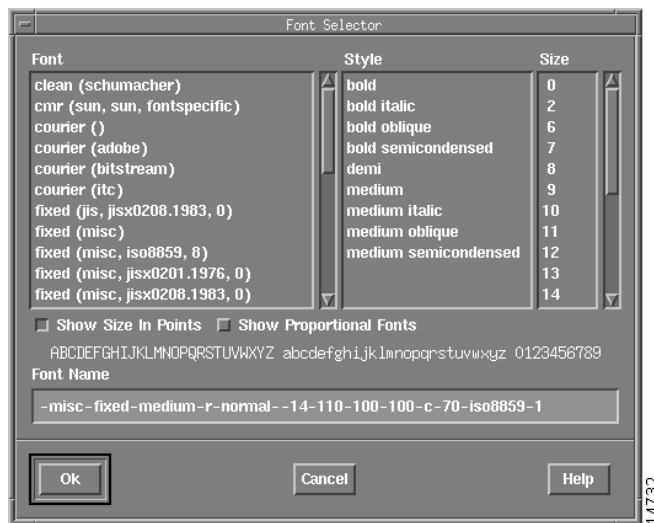
## Style Font

You can select a font for every style. The font is used for all text used by symbols with that style. To set the style font on the Style Editor window:

**Step 1** Click the **Select** button in the **Font** pane.

The Font Selector window appears, as shown in Figure 8-18.

Figure 8-18 Font Selector Window



**Step 2** Select the font name, style, and size from the three lists.

**Step 3** Click the **Add** button to add the font set.

The font settings appear in the **Font Set** field. If a character set cannot be rendered using the selected font, a message appears in the Font Selector window.



### Note

The ability to select more than one font is to allow for support of multibyte character sets.

**Step 4** Select the **Show Size in Points** check box to display font sizes in points (instead of pixels).

**Step 5** Select the **Show Proportional Fonts** check box to show all fonts including proportional fonts (instead of only fixed width fonts).

## Built in Styles

- There are two built in styles:
- **Default**, which is given to all new symbols when you first create them
- **Grid**, which is used to draw a grid on the background.

These styles cannot be deleted.

## Creating a New Style

To create a new style on the Style Editor window:

- 
- Step 1** Click the **New** button.
  - Step 2** Enter the style name in the **Name** field.  
The **Update** button turns red.
  - Step 3** Enter the style settings.
  - Step 4** Click the **Update** button to save the style and add it to the style list.
- 

## Modifying a Style

To modify a style on the Style Editor window:

- 
- Step 1** Select the style in the style list.  
Its name and settings appear.
  - Step 2** Modify the style, as needed.  
The **Update** button turns red.
  - Step 3** Click the **Update** button to save your changes.
- 

## Renaming a Style

To rename a style on the Style Editor window:

- 
- Step 1** Select the style in the style list.
  - Step 2** Click the **Rename** button.  
A window appears prompting for the new name.
  - Step 3** Enter the new name.
  - Step 4** Click **OK** to change the name.
-

## Deleting a Style

To delete a style on the Style Editor window:

- 
- Step 1** Select the style in the style list.
- Step 2** Click **Delete**.

If the style is referenced by existing symbols, a prompt appears allowing you to change all references to that style to refer to the **Default** style.

---

## Using the Access Control List

You can use the Access Control List window to:

- select the first Map page that appears when a map is opened in the Objective View
- control the users allowed to access the map.

To display the Access Control List window, shown in [Figure 8-19](#), click the **Access** button in the Objective View Map Editor.

**Figure 8-19** Access Control List Window



## Creating a New Access List Entry

To create an access list entry on the Access Control List window:

- 
- Step 1** Click the **New** button.
- Step 2** Enter the user name in the **User** field.

- Step 3** Enter the name of a Map page in the **Map** field.  
The **Update** button turns red.
- Step 4** Click the **Update** button to add the user.
- 

## Modifying an Access List Entry

To modify an access list entry on the Access Control List window:

---

- Step 1** Select a user in the list.  
The user's details appear.
- Step 2** Modify the **Map** field.
- Step 3** Click the **Update** button.
- 

## Deleting an Access List Entry

To delete an entry from the access list on the Access Control List window:

---

- Step 1** Select a user from the list.
- Step 2** Click the **Delete** button.
-

