

ARES Version 4.4.1



**Security and Access Control
Management System**

ARES

GRAPHICS MANUAL



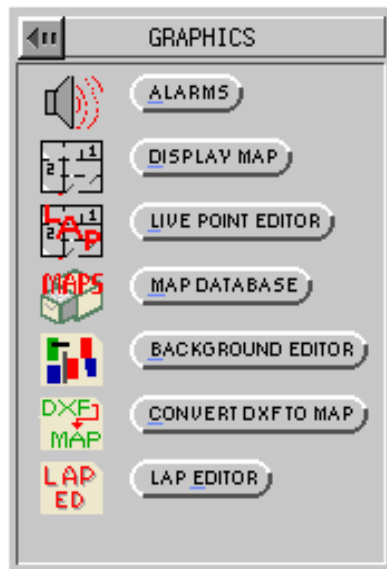
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TABLE OF CONTENTS

<u>GRAPHICS MENU</u>	<u>197</u>
CREATE GRAPHICS MAPS	198
DISPLAY MAPS	200
LIVE POINT OPTIONS	201
LIVE POINT EDITOR	202
MAP DATABASE	205
BACKGROUND EDITOR	206
LAP EDITOR	211
ICON EDITOR	211

GRAPHICS MENU



This function provides the operator with a dynamic graphical interface. An ARES map consists of:

1. **A Background Drawing**
- plus any of the following...
2. **Single LAP (Live Animation Point)**
- indicates position and status of a single device under control of ARES.
3. **Multiple LAP**
- indicates alarm status of one or many devices under control of ARES. Multiples only display when in an alarm state.
4. **Jump Zones**
- a shortcut to another map.
5. **Alarm Zones**
- like Multiple LAPs except clicking on an Alarm Zone icon causes the graphics to jump to the map with the highest priority with the oldest alarm associated with that Alarm Zone.
6. **Event Macro**
Clicking on an Event Macro icon causes an event, which ARES can use to perform Event Triggering. There are a possible 256 event macros.
7. **Event Macro with Confirmation**
Similar to 6 except that confirmation will be asked for before issuing the trigger.

Different icons on the maps are used to indicate the position of Doors, PIR detectors, Arming Stations, Readers, etc. The various states of alarms, isolates, tampers or seals are displayed on the maps by changing the color of the Icon to indicate the condition of the point.

Flashing Red:	Alarm has occurred. Waiting for an operator's response and to be reset.
Flashing Green:	Alarm has been reset, but waiting for operator's response.
Purple:	Alarm waiting to be restored.
Yellow:	Point has been isolated.
White:	Normal, no action required.

- Note:** 1) A maximum of 100 LAPs can exist on each map.
2) Each item can only be placed on a maximum of 4 maps.

The points on a graphic map can be utilized for alarm monitoring and remote control.

From the Graphics menu the user can create, edit or display a map. Auto Cad Data Exchange files (DXF files) may be Imported and are easily converted to QNX Windows Picture files from the "Convert DXF to Map" file menu. Creating your own maps is a simple process, and is done using the Map Background Editor.

Create Graphics Map:

To create maps for ARES, follow these three easy steps:

- 1) Draw Map:** From the **Main Menu / Graphics / Background Editor** menu, use the Background Editor to draw the map to your requirements. Save the map as a number from 1 to 9999 (this number must be unique).
- 2) Map it to the Database:** From the **Main Menu / Graphics / Map Database** menu, enter the number of the map you have created and type in a suitable description. Then **SAVE** the map.
- 3) Add LAP: (Live Animation Points)** From the **Main Menu / Graphics / Live Point Editing** menu, you can add Live Animation Points to the map. Select the map required and add the various Live Animation Points you need to the map. When done, **Save** the map.

To create graphics maps outside of ARES and by not using the Background editor, follow these steps:

MSDOS Formatted Bitmaps (.bmp) must meet the following criteria:

a) The .bmp file must be created on a screen size the same as ARES is running. For example, if ARES is running in 640x480 mode, then the MSDOS system must create the map using the same size.

b) The amount of colors must match too. For example, if ARES is using 16 colors, the MSDOS system must use 16 colors to create the map.

Once these criteria are met and the map is drawn, follow these steps to integrate the map with your ARES system:

- 1) Copy the file from the floppy onto the ARES hard drive.
- 2) Start the MSDOS file system driver: # Dosfsys &
- 3) Copy the file: # cp /dos/a/<filename> //1/usr/Ares/Graphics/xxxx.bmp

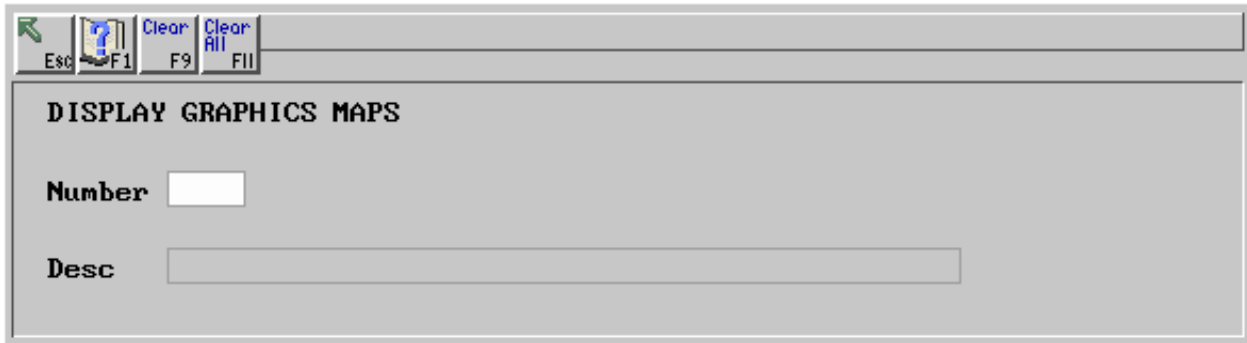
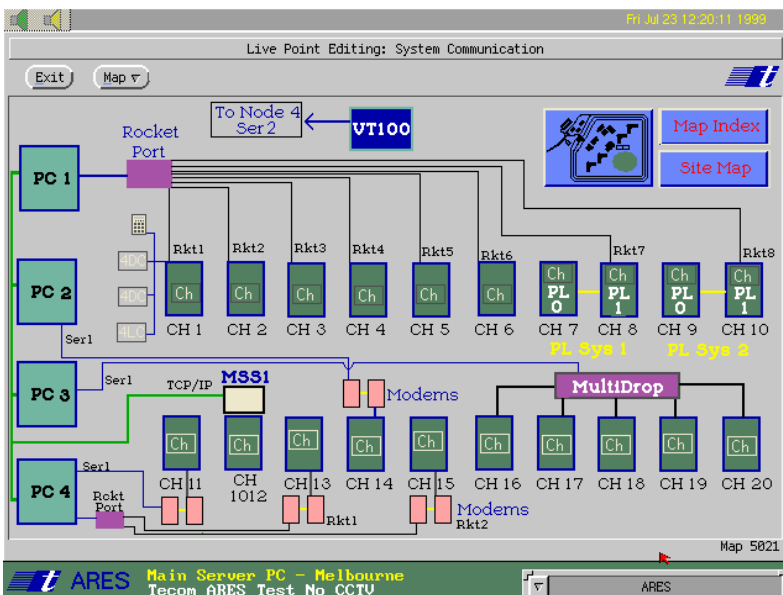
Note: The “a” in dos/a/<filename> may be “b” depending if a zip cartridge is in the PC. <filename> is the name of your map.
In “xxxxx.bmp” the xxxx refers to a number from 1 to 9999.

- 4) Then stop the MSDOS file system. This is a **very important step!**: # Dosfsys -x
- 5) Load the map into the ARES background editor from the **Main Menu / Graphics / Background Editor**.
- 6) Save the file.
- 7) **Map it to the Database:** From the **Main Menu / Graphics / Map Database** menu, enter the number of the map you have created and type in a suitable description. Then **SAVE** the map.
- 8) **Add LAP: (Live Animation Points)** From the **Main Menu / Graphics / Live Point Editing** menu, you can add Live Animation Points to the map. Select the map required and add the various Live Animation Points you need to the map. When done, **Save** the map.

Display Map:

This function is used to display a selected map.

Map Display Screens

Steps:

- 1) Select the desired map by directly entering its number then **F3**, or by searching. ARES will then display the selected map.

Map Menu Options

Select: The **Select** function allows the operator to quickly select a map if they already know the map number. A small screen will open. Enter the number of the required map directly into the **number** field, click **OK** or double click on the number. Press **Cancel** to escape and return to the original map.

- List:** The **List** function provides a list of map names which the operator may choose from to select the required map. Highlight a map number, click the **OK** icon or double click on the number. Press **Cancel** to escape and return to the original map.
- Next:** The **Next** function allows the operator to zoom in to the next map level of a selected point on the map. Once a point is selected on the map, click on **Next**. If another level of map has been programmed to this point, the screen will zoom to the next map.
- Previous:** The **Previous** function allows the operator to zoom out to the next map level of a selected point on the map. Once a point is selected on the map, click on **Previous**. If another level of map has been programmed to this point, the screen will zoom to the previous map.
- Refresh:** Redraws the current map.

Live Point Options

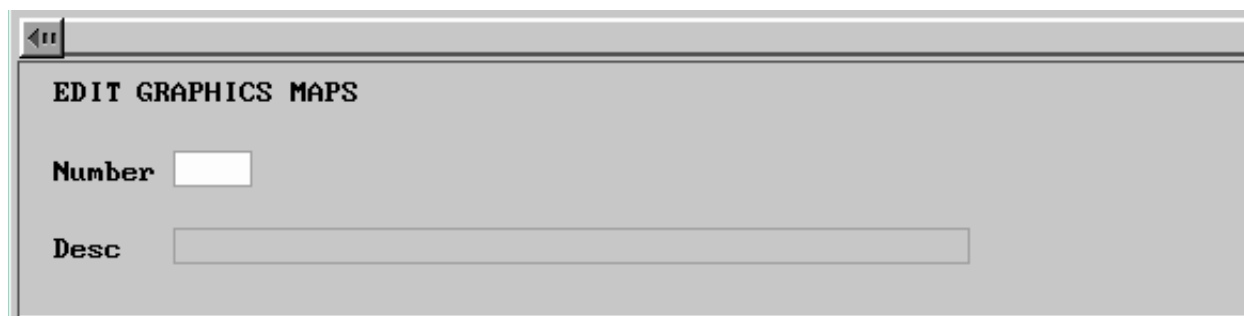
Clicking the right mouse button on live points brings up the following options. These options depend on the type of live point and the Operator's Access rights.

- Next:** The **Next** function allows the operator to zoom in to the next map level of the selected point. If another level of map has been programmed to this point, the screen will zoom to the next map.
- Previous:** The **Previous** function allows the operator to zoom out to the next map level of the selected point. If another level of map has been programmed to this point, the screen will zoom to the previous map.
- Remote:** The **Remote** function allows the operator to quickly perform system functions on the selected point. The actual functions will vary depending on the type of point selected. e.g. Input, Door, Area, RAS, DGP, etc. See **ARES Reference Manual, Remote Control Menu** for lists and descriptions of the actual Remote control functions available for each type of point. A display will appear that allows the operator to select the action required.
- Status:** The **Status** function provides details of the current status registered on the ARES system of a selected point on the graphics map. A display will appear that shows the current status of the point. Click on OK to clear the status window.
- Recall:** The **Recall** function allows the operator to send a status request to the appropriate Challenger, in order to receive an update on the status of a selected point. A request is sent to the selected point to return its current status to ARES. It does not result in any information being returned to the operator. (Only available on Direct Connect Challengers.)

Live Point Editor

This function is used to add, delete and edit various system points/doors and areas on an existing graphics map. The steps are the same as for Map Display.

Live Point Editor Screen



Map Editing

Map Menu Options

Select: The **Select** function allows the operator to quickly select a map if they already know the number of the map. A display will appear that allows the operator to type in a map number between 1 and 9999. Click on OK, or press **enter** to select the map.

List: The **List** function provides a list of map names which the operator may choose from to select the required map. A display will appear that allows the operator to select the required map. Position the cursor on the map name required, click to highlight the name, then click on OK to select the map.

Save: The **Save** function allows the operator to save changes made during the editing session. Once the required changes have been made, click on **Save**.

Refresh: Redraws the current map.

Display Mode: Enables the Operator to switch between “Edit” and “Display” modes so that the graphic map that will actually be displayed may be viewed without exiting the Edit function. This option should only be used for testing.

Add Options Menu

Class Single: Used to add new icons to a graphics map.

Steps:

- 1) To add an icon for an individual point from the Add menu, position the cursor on **Class Single** and click.
- 2) A list of the Point Types available will be displayed. Choose the type of point required by positioning the cursor on the point type and click. Click on **OK** to select the point type.

- 3) If Door, Area or Jump zone were selected go to Step 4. For all other point types another window will now be displayed enabling selection of symbols. Choose the symbol required by positioning the cursor on the symbol and clicking the mouse button. Click on **OK** to select the symbol. You can create your own symbols from the LAP editor under the graphics menu.
- 4) The position of the symbol on the map must now be determined by placing the cursor at the position required and clicking the mouse (you can move it later). If the point is an Area or a jump zone, it must be defined by using the mouse to draw an outline of the area or zone
- 5) The **Point Id** window will now be displayed to identify the name of the point. To locate the point name, type in an alphanumeric text string as the “search prefix”, then click on **OK**. A list of all points that correspond with your search criteria will now be displayed. (Points that have already been assigned to an icon on the map are greyed out and cannot be selected) Choose the point to be added by positioning the cursor on it and clicking. Click on **OK** to select the point name. You must have at least 1 alphanumeric character for searching.
- 6) The **Properties** window will now be displayed. Any other maps that this point already appears on will be indicated by map number/s in the “map allocation” list. The position of the map number indicates the “map order” (or zoom level) specified for each map. Each point can be included in four maps. To allocate the point to the current map displayed, type in the “map order” number for the point on this particular map and click on **Apply**. (Not the Map Number.)
- 7) To create another point of the same type, repeat steps 4 to 6. When complete press **Esc** to end.

Add Options Menu

Class Multiple: Used to create an icon on the graphics map that represents multiple points. E.g. Where a map of a large area (state, city, large site, etc.) is used as the highest map level, class multiple icons can represent all the points in a particular site or building. Represented on the map by a coloured circle or square, this only displays when one or more of the points defined to the multiple is in alarm.

Steps:

- 1) To add an icon for multiple points from the **Add** menu, position the cursor on **Class Multiple** and click.
- 2) A list of the Point Types available will be displayed. Choose the type of point required by positioning the cursor on the point type and clicking. Click on **OK** to select the point type.
- 3) The position of the Multiple Alarm Point symbol on the map must now be determined by placing the cursor at the position required and clicking. (It can be moved later.)
- 4) The **Point Id** window will now be displayed to identify the name of the point. To locate the point name, type in an alphanumeric text string as the “search prefix”, then click on **OK**. A list of all points that correspond with the type selected and your search criteria will now be displayed. (Points that have already been assigned to an icon on the map are greyed out and cannot be selected) Choose the point to be added by positioning the cursor on it and clicking. Click on **OK** to select the point name. You must have at least 1 alphanumeric character for searching.

- 5) The **Properties** window will now be displayed. Any other maps that this point already appears on will be indicated by map number/s in the “map allocation” list. The position of the map number indicates the “map order” (or zoom level) specified for each map. Each point can be included in four maps. To allocate the point to the current map displayed, type in the “map order” number for the point on this particular map and click on Apply.
(If the point is a door, choose the door symbol required before clicking on Apply.)
- 6) The **Point Id** window will now be displayed again to add other points to the Class Multiple icon. Repeat steps 5 & 6 until all points required have been included in the icon. When complete press **Esc** to end.

NOTE: Different types of points (eg: Doors, Inputs, Areas etc) can be added to one multiple alarm point by clicking on an existing point at step 3 instead of a blank spot in the graphic map.

Live Point Options

Clicking the right mouse button on live points brings up the following options.

Properties: To edit the properties of an existing icon, click on **Properties**. The properties window is displayed and can be edited as described in Step 6 of the Class Single or Class

Multiple programming procedures.

Erase: To remove either type of icon from the graphics map, click on **Erase**. Class Single icons will be erased instantly. For Class Multiple icons, a list of the points associated with the icon will be displayed, where individual points can be selected to be erased from the icon. The icon will be erased when there are no points allocated.

Adding Alarm Zones: Adding alarm zones is similar to Multiple LAPS. Note that like multiple LAPS, Alarm Zones only display if one or more points associated with the Alarm Zone icon are in an alarm state.

Adding Jump Zones: Click Jump Zone from the Add drop down menu. Move mouse pointer to desired location and click. Hold the mouse button down and draw the box around the physical text or item you want to use as a jump zone. Enter Next Map/Prev Map. Note if both Next and Prev are entered then the operator will be prompted as to which. If you only enter a Next, then clicking on the jump zone will take the operator straight to the next map without prompting.

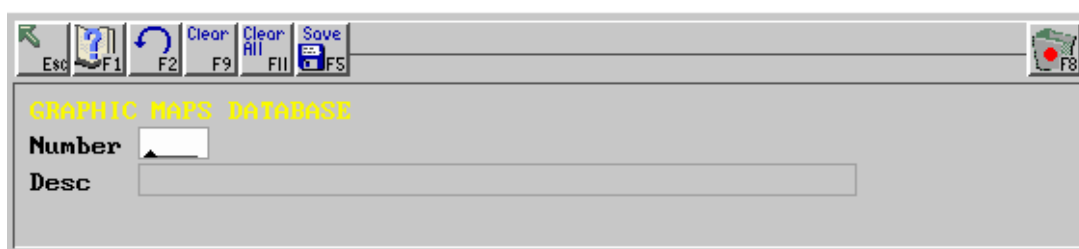
Adding Event Macros: Click Event Macro from the Add drop down menu. Select a suitable symbol. Position mouse pointer and click. Enter Macro Number and ID. Note that a particular macro number can only be entered once per map.

Adding Event Macros with Confirmation: As above, except it requires confirmation before the event Macro is activated.

Map Database

This function is used to add a new map to the existing Graphics Database. Until a map is allocated to the database, you will be unable to view it or add/edit LAP to it, even though it may exist on the hard disk.

Map Database Screen



The screenshot shows a software window titled "GRAPHIC MAPS DATABASE". The window has a menu bar with the following items: "Esc", "F1" (with a question mark icon), "F2" (with a circular arrow icon), "F9" (with "Clear All" text), "F11" (with "Clear All" text), "F5" (with a floppy disk icon and "Save" text), and "F8" (with a map icon). Below the menu bar, the text "GRAPHIC MAPS DATABASE" is displayed in yellow. Underneath, there are two input fields: "Number" with a small upward arrow icon to its left, and "Desc" with a long text entry box to its right.

Steps:

- 1) Select Graphics / Map Database.
- 2) Type the appropriate map and press **enter**.
- 3) Enter a description that reflects the map drawn.
- 4) Click the **save** icon to commit the record to the database.

Background Editor

The map background editor is an application package called QPaint. QPaint is a powerful bit-mapped graphic editor. The package can be used to create new maps and modify imported or existing maps. In addition, 16 colours and many different font types are provided to customise your image. 256 colors are available if the correct graphics card driver is used.

Background Editor Screen



Steps:

- 1) Select the Graphics icon from the main menu.
- 2) Select the Background Editor icon from the Graphics menu.

The editing screen pictured above will open with a fresh, blank page displayed. An image can be loaded from the existing database or created entirely from scratch. Using the menu options maps can be saved, named and edited.

File Menu



Clicking once on these menu options will produce the following effects:

- New:** Opens a new page.
- Load:** Loads an image from the graphic database. A screen will open displaying names of graphics files. Select the file required and click the **OK** icon. To escape, click the **cancel** icon or press esc.
- Save:** Saves the current graphics file.
- Save As:** Allows a changed image to be saved under a different name.
- Exit:** Returns to the Graphics menu.

Edit Menu



Clicking on these menu options will produce the following effects:

- Undo:** Erases the last action.
- Cut:** Cuts away a defined segment of an image for pasting.
- Copy:** Copies an image or defined segment.
- Paste:** Places a cut or copied image in a new location.

Text Menu



Clicking on these menu options will produce the following effects:

- Normal:** If this is selected all other options such as Bold or Italics will be removed.
- Bold:** This option will bold your text.
- Outlined:** This option will outline your text.
- Shadowed:** This option will shadow your text.
- Fonts:** This option will allow you to select a different font type.
- Default:** This option will set all options and the font type to the default settings.

Options Menu



Clicking on these menu options will produce the following effects:

- View Image:** The full image will be displayed. To return to the edit mode, click anywhere in the image.
- Brushes:** From this option, different brushes may be selected. The selected brush will remain active until the next brush change.
- Co-ordinates:** If this option is selected, X-Y co-ordinates will be displayed in the top frame bar which indicate the cursor's position in the image.

Help Option



Clicking on this icon will open up the following information.

- Help:** From this option help information about QPaint can be accessed.

Loading an Image

To load an image, select **Load** from the FILE menu.

Saving an Image

To save an image select **Save** from the FILE menu.

Selecting a Tool

Before anything can be drawn or the picture changed in any way, a drawing tool must be selected. To do this, click on the tool. When you move the cursor back into the drawing area the cursor may change shape, depending on what tool was chosen.

Selecting a Colour

In the bottom frame bar you will see two rows of eight colour blocks with the current colour settings to the left of this block. Clicking the left button on one of the colour blocks sets the foreground (inner) colour. Clicking the right button on a colour block sets the background (outer) colour.

Selecting a Line Thickness

The line thickness appears as the left-most item in the bottom frame bar. The line thickness represents the line width for all shapes which are subsequently drawn. To set the line thickness use the up and down arrow button next to the number or edit the number directly.

Exiting QPaint.

Select **Exit** from the FILE menu. If you have made any changes to your image which have not been saved, QPaint will ask if you want to save your image before exiting.



Cut and Paste (Scissors)

The Scissors tool allows you to copy or move a part of the image. Before a part of the image can be moved or copied, you must first select a rectangular area as follows:

- 1) Place the cursor at the top-left corner of the area you want to enclose.
- 2) Click and hold the left mouse button down.
- 3) Move the mouse to create a rectangular border around the area that you want and release the mouse button.

When Scissors is selected the **Cut**, **Copy** and **Paste** function in the EDIT menu will become active. Once you have selected an area using the above procedure, these functions can be used. The **Cut** function places the selected area into memory. The **Copy** function works like the **Cut** function except that the original selected area is left intact. The **Paste** function places a copy of the image that is in the PC memory on screen. The pasted image can then be moved and set into place.



Zoom (Magnifying Glass)

The Zoom tool allows viewing and/or editing of a magnified portion of the image. After selecting the Zoom tool the cursor will change to a magnifying glass. Place the magnifying glass over the portion of the image which you wish to magnify and click. Whatever was in the centre of the magnifying glass will be in the centre of the magnified image.

The magnification factor can be changed while the zoom tool is active, but before the image is zoomed (while the cursor is magnifying glass). To change the magnification factor, click on the ZOOM number up or down arrow buttons next to the number or edit the number directly in the tool frame bar. The lowest magnification is 6X while the highest is 24X.

While the image is enlarged, you can edit the image pixel by pixel.

After you are finished viewing and/or editing the zoomed image, press the **enter** key to accept any changes which were made to the image, or the **esc** key to return the image to the state it was in just before it was zoomed.

**Pen**

The Pen tool allows you to draw freehand as you would with an ordinary pen. Drawing is done in the current foreground colour.

**Line**

The Line tool allows you to draw a straight line from one point to another.

**Air Brush (Spray Can)**

The Air Brush tool allows you to draw selected shapes (called brushes) using a spray paint like effect. Different brushes may be selected by either double-clicking on the Air Brush button, or going to the **OPTIONS** menu and selecting **Brushes**.

**Paint Brush**

The Paint Brush tool uses the same brushes as the Air Brush tool, but draws in a more connected fashion. Different brushes may be selected by either double-clicking on the Air Brush button, or going to the **OPTIONS** menu and selecting **Brushes**.

**Fill (PaintRoller)**

The Fill tool lets you fill an area bordered by the background colour with the foreground colour.

**Text**

The Text tool allows you to type text at any place on the image (i.e. - for headings, captions, etc.).

When the text tool is selected the cursor will change to a “text” cursor whose height is the same as the current font height. Text style and fonts are selected from the TEXT menu. To change the font, select the **Fonts** item from the TEXT menu.

To place text on your image, move the text cursor to the place where you want the text to begin and click the left mouse button.

Circle (Ellipse)



The Circle tool draws both circles and ellipses. To draw an ellipse follow this procedure:

- 1) Place the cursor at the point where the center of the ellipse will be.
- 2) Click and hold the left mouse button down.
- 3) Move the mouse so that the ellipse grows to the desired shape and size.
- 4) Release the mouse button.

If you want the ellipse to be a perfect circle, press the Shift key after clicking the left mouse button in Step 2 above.

Filled Circle (Ellipse)



Filled circles and ellipses are drawn in exactly the same manner as regular circles and ellipses, except that the border is drawn in the current background color and they are filled with the current foreground colour.

Rectangle



The rectangle tool is used to draw both squares and rectangles. To draw a rectangle, follow this procedure:

- 1) Place the cursor at the top-left corner of where the rectangle is to be drawn.
- 2) Click and hold the left mouse button down.
- 3) Move the cursor (creating a pilot rectangle) to the lower-right corner of the desired rectangle and release the left mouse button.

If you want the shape to be a square, press the Shift key after clicking the left mouse button in step 2 above. Hold the shift key down while moving the cursor. The border of the rectangle will be drawn in the current foreground colour with width equal to the current line size.

Filled Rectangle



Filled Rectangles are drawn in exactly the same manner as regular rectangles, except that the border is drawn in the current background colour, and they are filled with the current foreground colour.

Erase

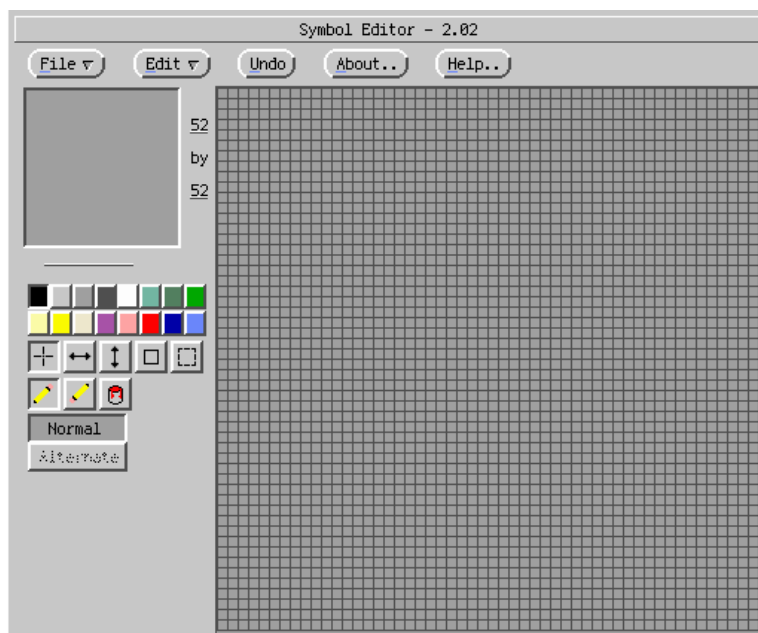
The Erase tool allows you to erase a portion of your image.

Erase-Colour

The Erase-Colour tool works like the Erase tool except that only pixels of the current foreground colour are replaced by the current background colour.

LAP Editor

See Online Help



Icon Editor

See Online Help

