



ArcView GIS

Adding Special Characters to Views and Layouts

by Krysha Dukacz, ESRI Technical Support

You may need to include special characters such as a registered trademark (®) or copyright symbol (©) in text in a view or layout. These characters are not accessible through the standard keyboard. Use the Character Map utility that comes with Windows 95/98 and Windows NT to enter these characters in ArcView GIS.

1. Launch ArcView GIS. Double-click on the legend in the view to invoke the Legend Editor. In the Font Palette portion of the Legend Editor, select the desired font or note the default font.
2. In Windows, click on the Start button and choose Programs > Accessories > Character Map or Programs > Accessories > System Tools > Character Map.
3. In the Unicode Character Map dialog box, select a font that matches the font selected for ArcView GIS.
4. Find the special character.
5. Click on the desired character. The Character Map utility will highlight the character and display the appropriate keystroke sequence in the lower right corner. Note the keystroke sequence.
6. Return to ArcView GIS. In a view or layout, select the text tool. While holding

down the Alt key, use the **numeric keypad** to enter the key sequence in the Text Properties dialog box. Release the Alt key and the symbol will appear in the dialog box. Click OK and the special character should appear in the view or layout.

Typing keystroke sequences may be cumbersome, especially if more than one special character is needed within a single string. Use copy and paste to speed the process or add multiple symbols embedded in text.

1. Go back to Character Map utility and select the desired character.
2. In the Character Map dialog box, click on the Select button. The selected character will appear in the Characters to Copy box.
3. Locate additional characters and press the Select button to add them in the Characters to Copy box. Text can be typed directly into the Characters to Copy box.
4. When finished, click the Copy button to save all the characters in the Characters to Copy text box to the Windows clipboard.
5. Return to ArcView GIS. Select the text tool and, in the Text Properties dialog box, paste the string from the Characters to Copy text box by using Ctrl+V.



Add special characters to layouts using the Windows Character Map utility.

Some special characters in some fonts will display as the keystroke sequence in the Text Properties box but will appear as the correct symbol in the view or layout. For example, using the Wingdings font to add an airplane symbol produces the Q character in the Text Properties box. However, after clicking OK, the correct airplane symbol will appear in the view or layout. Some of the special characters may not appear at all in the Scripts window. Make sure the fonts in ArcView GIS and the Character Map match.



Avenue

Assigning Pen Symbols to Polygons and Graphics

By Thomas Purk, ESRI Technical Support

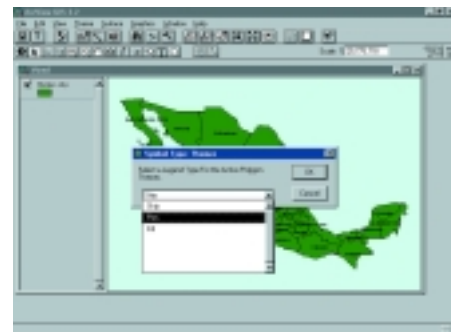
Assign pen symbology to polygon features without having to convert them to polylines using the script on the next page shown in Figure 1. This script works on both themes and graphics and allows any pen symbol including dashed lines. Since a polygon is really a fill symbol, applying a pen symbol to the outline simply makes the polygon transparent.

To use this script conveniently, attach it to a button on the View GUI by following the steps outlined below.

1. Type or copy and paste the code in Figure 1 into a new Script file.
2. Compile it by clicking on the Run button.
3. Choose Script > Properties and rename the script View.PenSymbol or some other

appropriate name.

4. Invoke the Customize dialog box either by returning to the view and double-clicking on any part of the Button bar without an existing button or by going to the project view and selecting Customize from the Project menu.
5. In the Customize dialog box, set the Type to View and the Category to Buttons.
6. The existing buttons for the view document will appear. Hit the New button to create a blank button.
7. In the properties table below the buttons, double-click on the blank line next to the Click property. Choose the View.PenSymbol script from the Script Manager to attach it to the button.
8. To place an icon on the button, double-



Change a theme or graphic from pen to fill using this script.

click on the blank line next to the Icon property and choose an icon from the Icon Manager.

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Assigning Pen Symbols to Polygons and Graphics

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To use the new button

1. Select a polygon graphic and/or make a polygon theme active.
2. Run the script by clicking its button.
3. Select the symbol type, either Pen or Fill. The theme or graphic will change to reflect the option selected.
4. Double-click on the legend to bring up the appropriate symbol palette and select the new symbol for the theme or graphic.

These changes can be undone by rerunning the script and choosing the opposite symbol type. Using this script on themes containing multipart polygons (i.e., canada.shp in the sample data set) may result in unusual display behavior. The display can often be corrected by closing and reopening the view.

Figure 1

```

'- This script changes the Symbol or Legend
'- type of selected Graphics or Themes.

'- Get the current View document
v = av.getactivedoc

'- Return a list of selected graphics
theGraphics = v.GetGraphics.GetSelected

'- Create a list only of selected polygon
graphics
theGList = GraphicList.Make
for each g in theGraphics
  if (g.getshape.getdimension = 2) then
    theGList.Add (g)
  end
end

'- If any polygon graphics are selected,
'- prompt user to specify a symbol type.
if (theGList.count > 0) then
  theGChoice = (MsgBox.ChoiceAsString
  ({ "Pen", "Fill" },
  "Select a Symbol Type for the Selected
  Polygon Graphics.", "Symbol Type: Graphics"))

  if (theGChoice = "Pen") then
    theGSymbol = Symbol.make (#SYMBOL_PEN)
  end

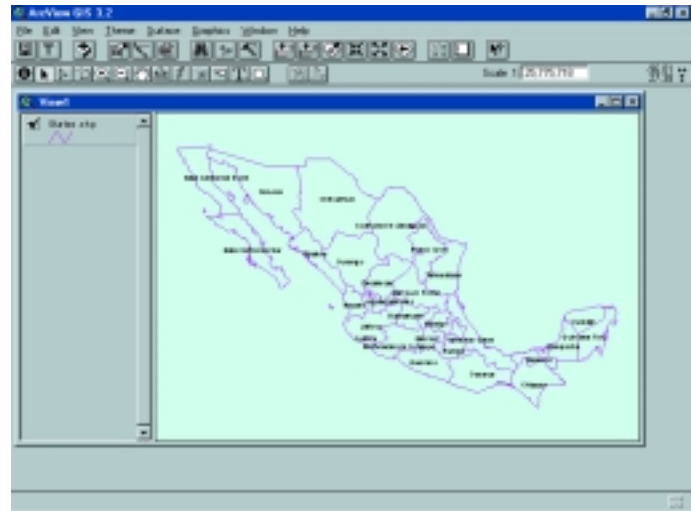
  if (theGChoice = "Fill") then
    theGSymbol = Symbol.make (#SYMBOL_FILL)
  end
end

'- Assign the specified symbol to each
'- polygon in the list of selected graphics.
for each pg in theGList
  pg.SetSymbol (theGSymbol)
end

'- Return a list of active Themes
theThemes = v.GetActiveThemes

'- Create a list only of polygon themes from
'- the set of active Themes in the View

```



Applying pen symbology to a polygon makes the polygon transparent.

```

thePThemes = list.make
for each t in theThemes
  if (t.getftab.findfield("shape").gettype =
  #FIELD_SHAPEPOLY) then
    thePThemes.add (t)
  end
end

'- If any polygon Themes are active,
'- prompt user to specify a symbol type
if (thePThemes.count > 0) then
  theSChoice = (MsgBox.ChoiceAsString
  ({ "Skip", "Pen", "Fill" },
  "Select a Legend Type For the Active Polygon
  Themes.", "Symbol Type: Themes"))

'- Loop through the list of active polygon
'- Themes and apply the user's selection
for each pt in thePThemes
  if (theSChoice = "Skip") then
  elseif (theSChoice = "Pen") then
    pt.setlegend (legend.make (#SYMBOL_PEN))
    pt.updatelegend
  elseif (theSChoice = "Fill") then
    pt.setlegend
    (legend.make (#SYMBOL_FILL))
    pt.updatelegend
  end
end
end

'- Force the View to redraw.
v.invalidate

'- End of Script

```



ArcLogistics Route

Importing an Excel Table

By Linda Schmidt, ESRI Technical Support

ArcLogistics Route can import data stored in an Excel table as a Data Source Name (DSN). To do so you must create a DSN file for the table and select the driver in Windows 95/98 or Windows NT 4.0. Follow the steps described here.

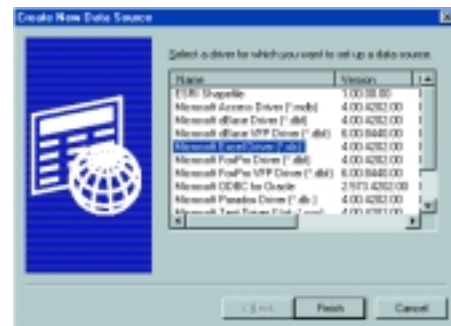
1. In Windows, go to Start > Settings > Control Panel.
2. Double-click on the ODBC Data Sources icon.
3. Choose the User DSN tab and click on the Add button.
4. In the Create New Data Source dialog, select Microsoft Excel and click Finish.
5. In the ODBC Microsoft Excel Setup dialog, enter a name for the data source in the Data Source Name field. The description is optional. In the Database section, use the default value for the Version field.
6. Click on Select Workbook. Navigate to the

workbook location and click OK.

7. Click OK in the next dialog and close the Control Panel.

Start ArcLogistics Route. Follow these steps to import the Excel table.

1. From the menu choose File > Import Orders or click on the Import Orders icon to invoke the Order Wizard.
2. Select the Import Profile to use from the drop-down list and click Next.
3. Select the Routing Folder to use from the drop-down list and click Next.
4. Click the radio button for Use a Data Source Name (DSN).
5. Click on the radio button for System or User DSN and press the Browse For System DSN button.



Import Excel data into ArcLogistics Route using a DSN file.

6. Select the Excel table.

Complete the rest of the Import Profile process. The Excel table will now be properly imported.



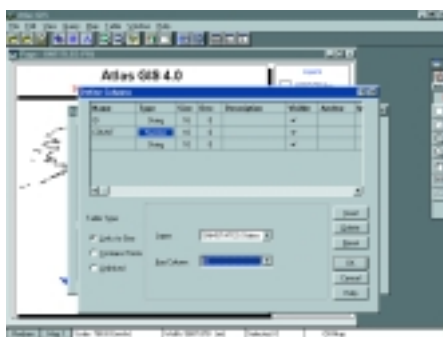
Atlas GIS 4.0

Finding the Number of Points in a Polygon

By Linda Schmidt, ESRI Technical Support

Finding the number of points in a polygon is a straightforward procedure. Just aggregate the polygon data and put the count in a separate column. The following example uses a geo file containing ZIP Code data (zipcode.agf) and a geocoded point file (managers.dbf). Follow the procedure outlined here to find how many managers are within a specific ZIP Code area:

1. Open the zipcode.agf and managers.dbf files.
2. From the menu, choose Table > Aggregate Data to bring up the Aggregate Data dialog box.
3. Under the section Calculate Data For, choose zipcode.agf from the drop-down box next to Layer. Leave the Update Selected Features box unchecked.
4. Under the Select Copy Feature Count To, click on the New Table button.
5. In the New Table dialog, name the new table Count.
6. Click the radio button next to Define New Table and click OK.
7. In the Define Columns dialog, create a column to hold the number of managers in a ZIP Code and name it Count. Under



Atlas GIS 4 makes it easy to count the number points in a polygon and place the number in a separate table column.

- Type, define the data in this column as Number.
8. Click the radio button next to Links to Geo.
9. In the Layer drop-down box choose zipcode.agf and in the Key Column drop-down box choose ID. Click OK.
10. The program will return to the Aggregate Data dialog box. In the Copy Feature Count To drop-down box, choose the newly created column called Count.
11. In the section Under Aggregating Data

From, choose managers.dbf for the Layer and leave Selected Features Only box unchecked. Leave Options at the default setting of Aggregate to Nearest Containing Feature.

12. Click OK.

You should now have a linked table showing the new column on the right side of the zipcode.agf with the number of points for each ZIP Code polygon. This data can be thematically mapped based on the number of points (managers) in each ZIP Code area. **AU**

DISCLAIMER

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