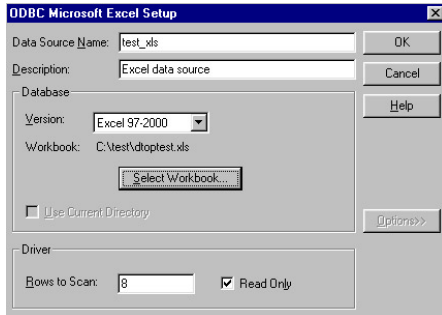


Desktop ArcInfo

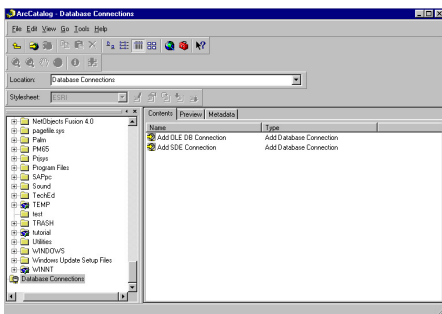
Connecting ArcCatalog to an Excel Spreadsheet

By Robert Nicholas, ESRI Technical Support

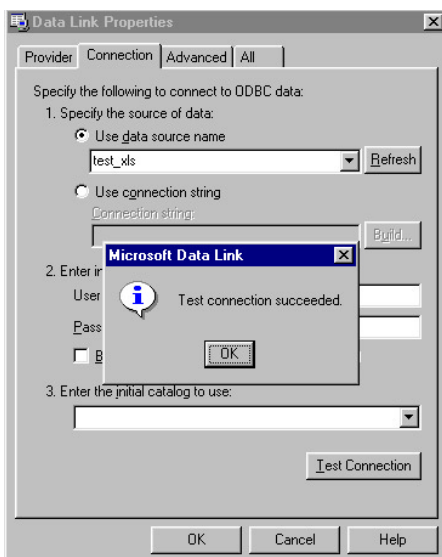
ArcCatalog can retrieve data from Microsoft Excel 5.0, 7.0, 97, or 2000 files. Excel must be included as an Open Database Connectivity (ODBC) data source in Windows NT, the data in the desired spreadsheet must be displayed in OLE DB table format, and a connection to the Excel file must be made in ArcCatalog. Follow these steps to make Excel files available to ArcCatalog.



First specify Excel as an ODBC Data Source in Windows NT.



Next add the OLE DB connection in ArcCatalog.



Click the Test Connection button to verify the connection works. A message box should confirm that the connection has succeeded.

Set Up an ODBC Data Source Name

1. In Windows NT, choose Settings > Control Panel.
2. Click on ODBC Data Sources to bring up the ODBC Data Source Administrator dialog box.
3. Select the User DSN tab and click the Add button.
4. Choose Microsoft Excel Driver (*.xls) and click the Finish button.
5. In the ODBC Microsoft Excel Setup dialog box, enter a name (such as test_xls) and description for the data source and click on the Select Workbook button.
6. Navigate to the folder containing the Excel data files and select an .xls file.
7. Click OK three times to exit all the dialog boxes and finish creating the new data source.

Display Excel Data in OLE DB Table Format

ArcCatalog uses OLE DB providers to retrieve data from databases. This step defines the data in the Excel file that will be displayed in ArcInfo.

1. Open the Excel file that was specified in the previous step. In that spreadsheet, select (highlight) all the data that will be displayed in ArcInfo.
2. Choose Insert > Name > Define and type in the name to be assigned to the selected cells. This name will appear in the tables list when the OLE DB connection is expanded in ArcCatalog or ArcMap.
3. Save the file and exit Excel.

Connect to the Excel File in ArcCatalog

The only remaining task is adding the OLE DB connection to the Excel file in ArcCatalog.

1. In ArcCatalog, click on the Contents tab in the right panel. In the left panel, scroll down the Catalog file tree to Database Connections and click on it. Double-click on Add OLE DB Connection, which now appears in the right panel of the ArcCatalog interface.
2. Select Microsoft OLE DB Provider for ODBC Drivers and click Next.
3. In the Data Link Properties dialog box, make sure "Use data source name" is chosen and select test_xls from the drop-down list. Use the Refresh button if necessary. Click the Test Connection button to verify the connection works. A message box should confirm that the connection has succeeded. Click OK to finish the process and close the dialog box.

In the right panel of ArcCatalog, click on the Preview tab. In the left panel under Database Connections, expand the OLE DB Data.doc connection. The name of the data selected in the Excel file appears. Double-click on the Excel file to display it in the Preview panel on the right. ArcCatalog sets the column headings based on the values contained in the first row of the Excel spreadsheet. Make sure the first row of the spreadsheet (or text file) contains column headings. It is not necessary to define the data in text or FoxPro files. An OLE DB connection requires the data to be available as a table. Excel returns "SYSTEM TABLE" for sheet names and "TABLE" for tables within worksheets. ■

ArcView GIS

Using Colors from an ArcInfo Shadeset

By Thomas Purk, ESRI Technical Support

ArcInfo shadesets contain both fill patterns and colors. It may be useful to maintain a standard set of fill patterns and colors for both ArcInfo and ArcView GIS. Although ArcView GIS can use the pattern information as a polygon fill by loading the shadeset into the palette, it cannot use the color information. Use this method and the script supplied with this article to convert the colors in an ArcInfo shadeset into an ArcView GIS color palette. This method requires ARC GRID.

Saving the Shadeset to a Colormap in ArcInfo

1. Start ArcInfo and initialize GRID.
ARC: grid
2. Load desired shadeset. A path name may be needed if the shadeset is not located in the ArcInfo symbols directory.
GRID: SHADESET <shadeset_file>
3. Save the active shadeset that was just specified as a colormap with a new name. By default, ARC GRID will place the colormap file in the Temp directory.
GRID: SAVECOLORMAP <new_colormap_file>
4. Exit ArcInfo.

Converting the Colormap to a Color Palette in ArcView GIS


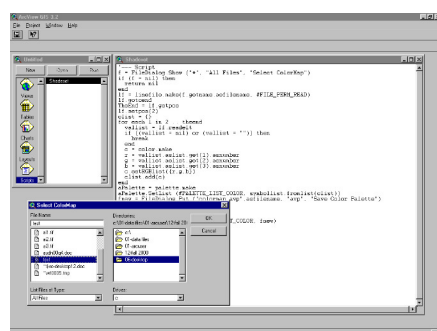
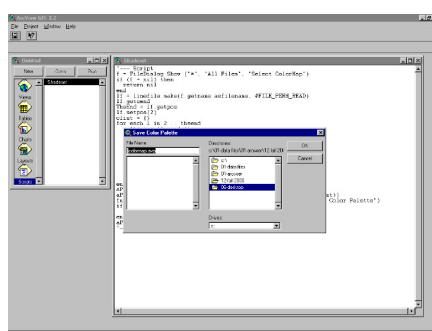
1. Start ArcView GIS.
2. Open a new script window and copy the script in Figure 1 into it.
3. Compile and run the script.
4. In the Select Colormap dialog box, navigate to the location of the colormap file created in ARC GRID. Click OK.
5. In the Save Color Palette dialog box, specify a name and location for the new color palette file and let the program save it with the .avp extension.
6. Choose Windows > Show Symbol Window from the menu bar.
7. Click the icon for the Palette Manager, located on the right side of the dialog box. In Palette Manager, click on the Load button.
8. Navigate to the location of the new color palette created in step 5 above and click OK. The colors from the ArcInfo shadeset can now be selected from the Color Palette Window in ArcView GIS. 

FIGURE 1

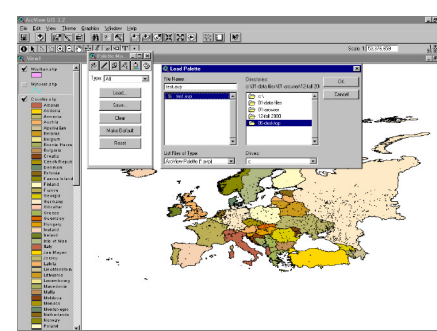
```
'--- Script
f = FileDialog.Show ("*", "All Files", "Select
ColorMap")
if (f = nil) then
    return nil
end
lf = linefile.make(f.getname.asfilename,
#FILE_PERM_READ)
lf.gotoend
TheEnd = lf.getpos
lf.setpos(2)
clist = {}
for each l in 2 .. theend
    vallist = lf.readelt
    if ((vallist = nil) or (vallist = "")) then
        break
    end
    c = color.make
    r = vallist.aslist.get(1).asnumber
    g = vallist.aslist.get(2).asnumber
    b = vallist.aslist.get(3).asnumber
    c.setRGBlist({r,g,b})
    clist.add(c)
end
aPalette = palette.make
aPalette.SetList (#PALETTE_LIST_COLOR,
symbolist.fromlist(clist))
fnew = FileDialog.Put ("colormap.avp".asfilename,
"avp", "Save Color Palette")
if (fnew = nil) then
    return nil
end
aPalette.SaveToFile (#PALETTE_LIST_COLOR, fnew)
'--- End of Script
```



Copy, compile, and run the script in Figure 1. When prompted, navigate to the location of the colormap you saved in ArcInfo.



In the Save Color Palette dialog box, specify a name and location for the new color palette file and let the program save it with the .avp extension.



Navigate to the location of the new color palette just created and click OK. The colors from the ArcInfo shadeset can now be selected from the Color Palette Window in ArcView GIS.

ArcCAD

Transferring Point Symbols from ArcInfo

By Lisa Pitts, ESRI Technical Support

ArcInfo and ArcCAD use different methods to store symbology. Each ArcCAD marker symbol is an AutoCAD block. AutoCAD groups entities such as symbols and drawing parts into blocks. The following method converts ArcInfo marker symbols into AutoCAD blocks—a format ArcCAD can use.

Convert an ArcInfo Coverage to a DXF File

1. Start ArcInfo. Use the FONTARC command from an ARC prompt to convert marker symbols into coverages. The syntax for this command is

```
FONTARC <in_font> <in_pattern> <out_cover>
```

See the ARC Command Reference for more information about FONTARC.

2. Use the ARCDXF command to convert the ArcInfo coverage created with FONTARC to a file in AutoCAD Drawing Interchange File (DXF) format. FONTARC syntax is

```
ARCDXF <out_dxf_file> {in_line_cover} {in_point_cover}
{in_annotation_cover} {decimal_places} {ASCII|Binary}
<out_dxf_file> is the DXF file to be created
{in_line_cover} {in_point_cover} {in_annotation_cover} are
the input coverages
```

3. Once all coverages have been converted to DXF files, exit ArcInfo.

Draw Point Features in ArcCAD Using the New Marker Symbols

1. Start ArcCAD. Use the DXFIN command to bring the DXF files into AutoCAD. Type DXFIN at the command prompt and navigate to the location of the DXF files just created and select one of the files. Create blocks using the AutoCAD BLOCK command. These AutoCAD blocks can be used to replace the corresponding symbols in an ArcCAD symbolset file or can be placed in a new markerset file.
2. Use the SYMLOAD command to load a new markerset file or to reload a modified markerset file into the current drawing.
3. If the Point Attribute Table (PAT) for the point coverage contains the symbol numbers for displaying the points, choose DISPLAY > POINTMRK from the menu bar and choose the Item option. The Item option indicates the values of items in the PAT that are used as the marker symbol numbers.
4. When prompted, enter the item name. This item can also be used to look up symbol numbers in a lookup table. ArcCAD will also prompt for the name of the lookup table that contains the marker symbol numbers that will be used to draw the points.
5. If an item (or lookup table) containing the marker symbol numbers does not exist for the point theme, add an item (using ADDITEM) to the PAT file that will contain the marker symbol values and use POINTMRK with the Item option as described previously to display the points. The points in the point coverage are now displayed as blocks. **AU**

Disclaimer

The user assumes all responsibility for use of the sample routines as well as implementation of them to achieve the intended results. The user is responsible for fully testing each portion of the routine prior to relying on it. This information is offered as a sample only, and ESRI assumes no obligation for its operation, use, or any resultant effect in spite of this offer. This information and these sample routines are provided on an "as is" basis, without warranty of any kind.

Please remember to back up your data prior to using this information.