

ArcGIS 9

What is ArcGIS 9?

The ArcGIS system is a powerful integrated suite of GIS applications capable of performing advanced mapping, data management and geoprocessing of spatial data. It is one of several Geographic Information Systems (GIS) packages available at the LSE.

The three applications in the ArcGIS suite are:

- ArcCatalog – aids with the organisation and management of all GIS data.
- ArcMap – the central application within the suite, ArcMap is used for all map-based tasks inc. Cartography, Map analysis and editing.
- ArcToolbox – this contains a large number of GIS tools for geoprocessing and file conversion.

Staff need to contact their Cluster teams to install this software. Students should contact their course tutor for access to this software.

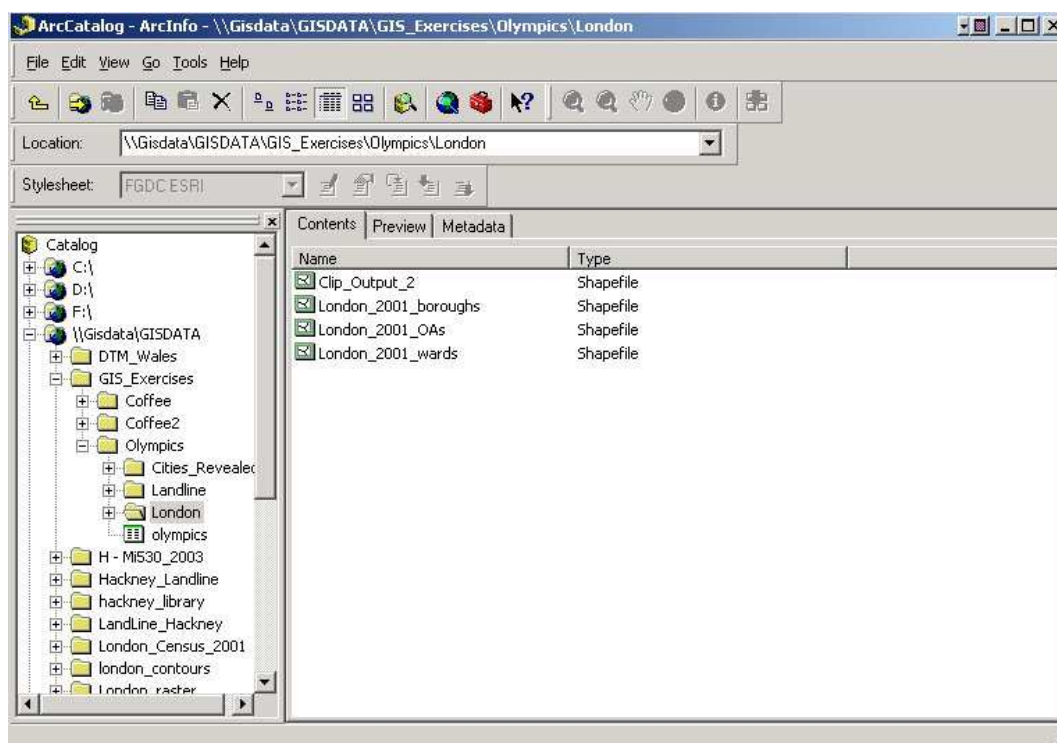
Getting started with ArcGIS 9

ArcMap and ArcCatalog share a number of common toolbar commands for navigating the map data.


STEP 1 - ARCCATALOG

The first stage is to open ArcCatalog. Click **Start | Programs | ArcGIS – ArcCatalog**.

A window similar to Windows Explorer is displayed.



Use the left pane of the Catalog to navigate to data on local drives, or
Connect to a networked resource

- Click on the Connect to Folder button 
- Navigate to the networked resource.
*Once selected it will appear in the left hand pane as a new resource.
For example:*



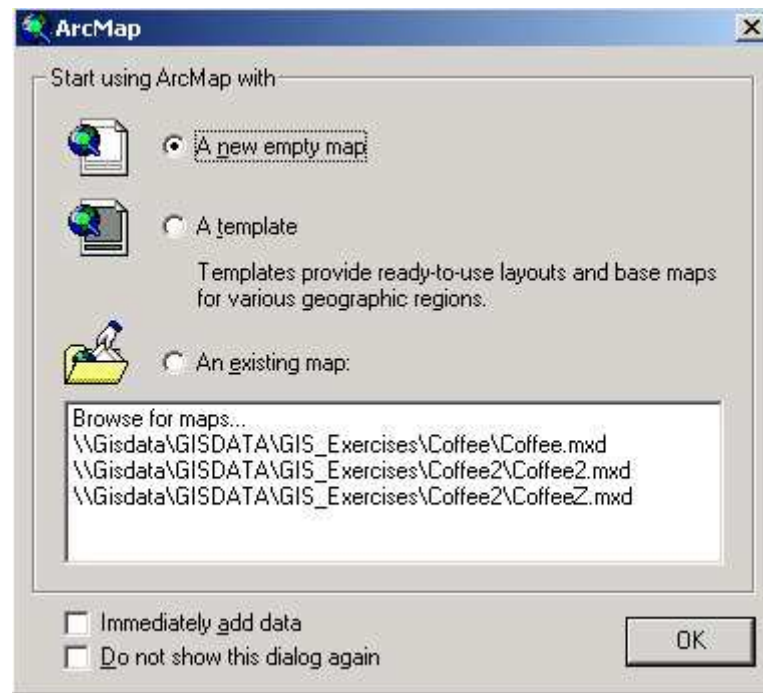
Depending on which tab is chosen, the right pane can be used to:

- view the file listing of the drive/networked resource,
- preview the map/data table
- show the metadata for the file.

STEP 2 – ARCMAP

Once you have organised your data in ArcCatalog, open ArcMap. This can be done in two ways:

1. Click on **Start | Programs | GIS and Mapping | ArcGIS – ArcMap** or, in the ArcCatalog, click on the **Open ArcMap** button.
The ArcMap open dialog appears.

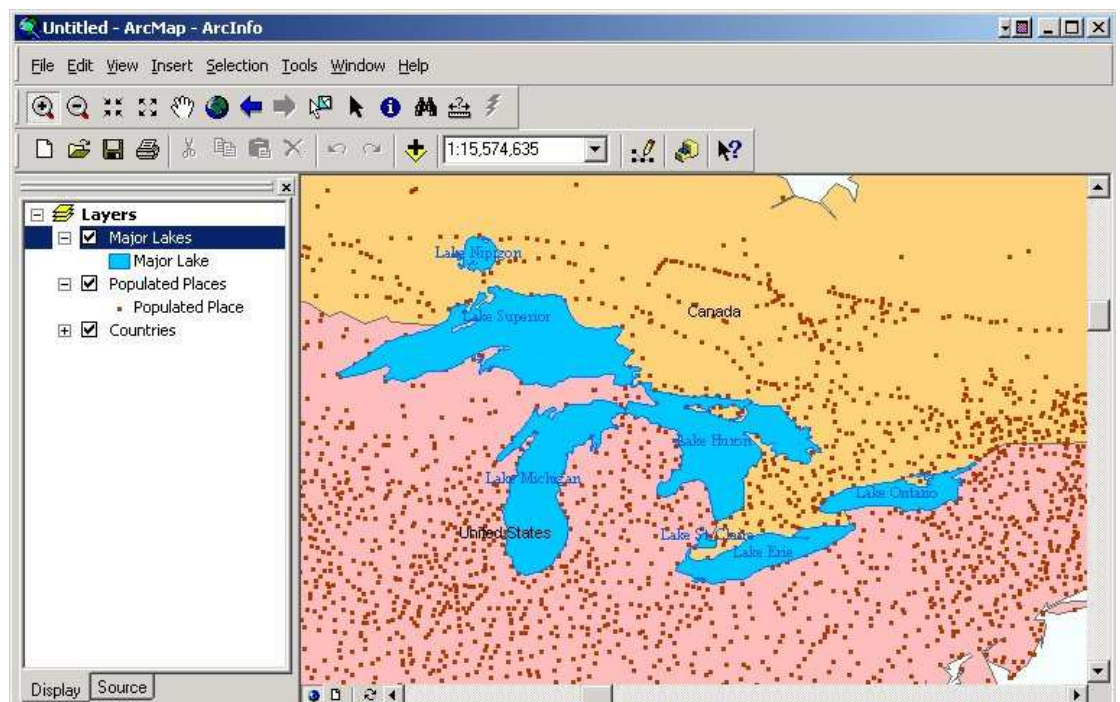


- Initially select 'A new empty map' and click **OK**.

Tip

You can also open previously created maps for this dialog box

The ArcMap window is split into two panes - Layer and Map



The Layer pane, on the left, allows for the organisation and management of the layers within the map.

The Map pane is the main workspace, graphically showing data and allowing for spatial analysis of the projected data.

To add a layer to the new map

Simply drag a file from ArcCatalog into the Layer pane.
The layer will then be added to your map.

By dragging several layers to the Layer pane you can build up a map containing several forms of data ready for analysis.

Viewing and Navigating of Map Data.

In both ArcCatalog and ArcMap there are tools for viewing and navigating the map data. As map data can be very detailed, the zoom and pan functions are useful for viewing selected areas of the map.

To zoom in and out

Select the appropriate zoom button and either click on a certain point of the map or drag out a rectangle of the area.



Tip

If at any time you wish to go back to the complete view of the map click on the Full Extent button.



All spatial data is in one of four forms

- Point – e.g. post boxes, pylons
- Line – roads, power lines
- Polygon – postcode area, country boundaries
- Raster – OS maps, aerial photos, satellite images

If several layers are being used, this is the order in which these layers are viewed.

Oops

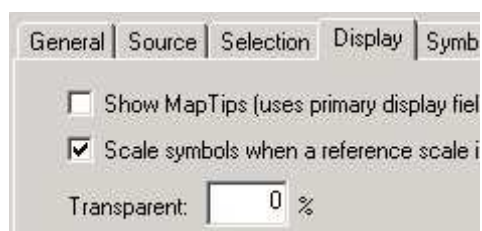
Beware, if you place a raster image before a set of point data, the image will mask the points.

To aid viewing

In the Layer pane of ArcMap you can reorder the layers simply by dragging the layer up or down through the list of viewable layers. The layer at the top being the uppermost layer viewable.

To make a layer transparent

1. Right-click on the layer name.
2. Select **Properties**.
3. Click on the **Display** tab.
4. Change the transparency from 0% (Fully Viewable) to 100% (Fully Transparent).



Getting Help

Help can be obtained at any time and in any of the suite applications by pressing F1.

The ESRI help system has local information as well as links to web-based resources.