System

MicroImages' WMS and ArcIMS Catalogs

Various organizations, including MicroImages, maintain catalogs of the WMSs published on the Internet. The names and addresses (which means URLs) of these catalogs are installed as an XML file as part of your TNT product to assist you in locating map and image layers published by these WMSs. Viewing the corresponding list of catalogs on the Catalogs panel of the Web Map Service Selection window requires no connection to the Internet or any WMS. You can pause the cursor over any of the catalog names in this panel to view where it is published (which means the catalog's URL) and view the abstract provided by its originator at the time it was added by MicroImages to the catalogs list.

MicroImages maintains a similar list of ArcIMS catalogs, which is also installed with your TNT products as an XML file that provides the default content for the Catalogs panel of the ArcIMS Service Selection window when you choose to add an ArcIMS layer. MicroImages has also started maintaining a WFS catalog. An entry point to this catalog is not yet installed with the TNT products because WFS layer support is not yet complete.

When a catalog is expanded in this panel (by clicking on the + to its left), your TNT product uses its address and your Internet connection to request that catalog's current contents from the web site that maintains it. For example, MicroImages' catalogs are updated frequently and validated daily; your query results will reflect the latest contents. If a catalog is received (in XML), the WMSs that it has indexed are decoded and listed on the Catalogs panel. The DataTip for the services in a catalog displays the service's URL. MicroImages' current WMS catalog indexes more than 2,000 WMSs that publish over 900,000 map and image layers (see table below). MicroImages' current ArcIMS catalog list more than 20,000 ArcIMS access points offering approximately 400,000 layers.

Choosing a WMS from the selected catalog's list directs a second request to that specific WMS for a variety of standard information about the map and image layers it is publishing (for example, available layer names and titles, their geographic extents, formats, Coordinate Reference Systems supported, access permission requirements, and so on). ArcIMS services have less information available in their responses when selected from a catalog list, providing only available layer names and geographic extents.
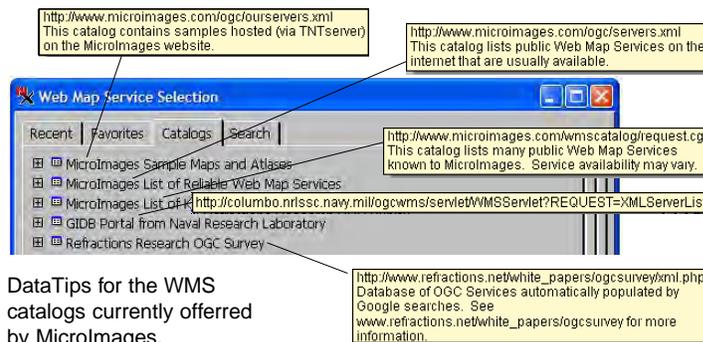
DataTips for the WMS catalogs currently offerred by MicroImages.

Pausing the cursor over the status line after a service has responded displays a DataTip with the service title, WMS version, maximum height and width, access, and constraints for the WMS (see the Technical Guide entitled *Spatial Display: Locating and Using WMS Layers*). None of this information is available for an ArcIMS service, so its less informative DataTip matches the URL in the line above (see the TechGuide entitled *Spatial Display: Locating and Using ArcIMS Layers*).

When you select a WMS or ArcIMS of interest and the site responds with the appropriate information, the OK button becomes active and will open the Service Layer Controls for the Web Map Service or ArcIMS, which lets you browse through the layers offered by a specific service. The purpose of this control window is similar to those used to set up vector, CAD, raster, and other object types for addition to a composite TNT view or modification of display parameters for an object already in the view. You can choose the map and image layers of interest from the WMS and set the options for how they will be drawn in the composite view with your local geodata layers. You can choose a preferred CRS and format from among those advertised by the service, set the overall transparency for a layer, and choose whether to detect the background color, white, and/or black to treat as null. If you have layers in your view in a CRS not advertised by the service, TNT will warp the web layers to match.

You can add to the WMS or ArcIMS catalogs list installed with the TNT products by clicking on the Add Catalog button on the Catalogs panel of the Service Selection window and entering the URL location of the catalog and the name you want to use for it. This catalog entry is then added to the catalogs XML file on your machine.

as of 16 May 2008	Service Type		
	WMS	ArcIMS	WFS
Distinct Servers	404	1,015	72
Services	2,416	20,171	144
Layers	982,735	439,741	4,114