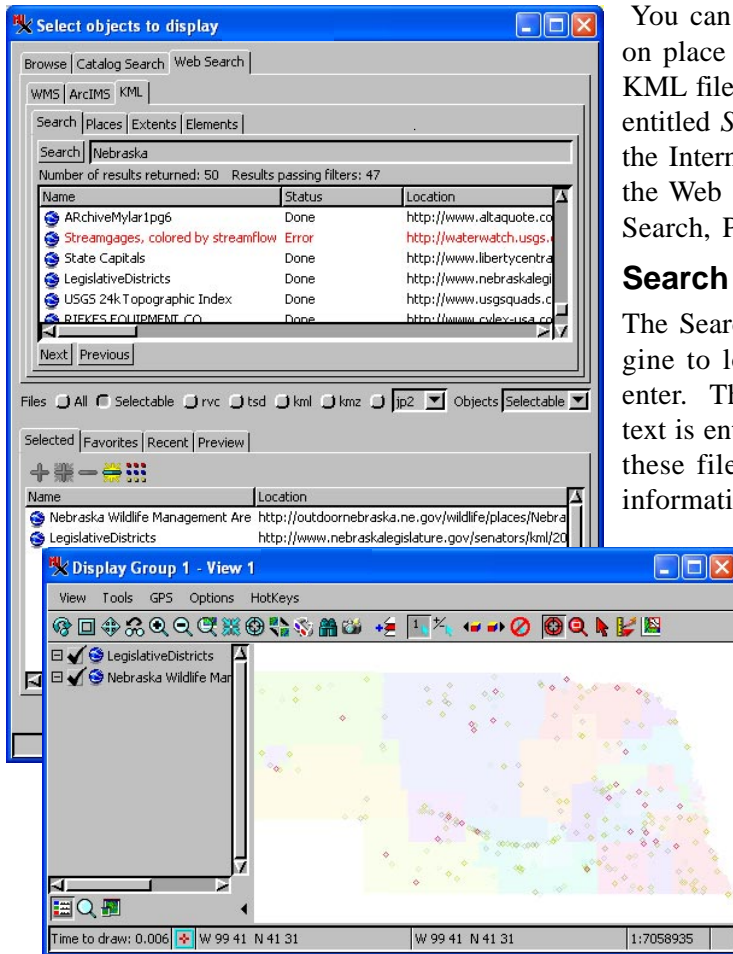


Search for KML Files on the Internet



You can use TNTmips to search the Internet for KML files based on place name, extents, and/or number of elements. Direct use of KML files with a known location is described in the Technical Guide entitled *System: Direct Use of KML/KMZ Files*. To begin searching the Internet for KML files, open the Select Objects dialog, click on the Web Search tab, then on the KML tab and choose between the Search, Places, Extents, and Elements tabs.

Search Panel

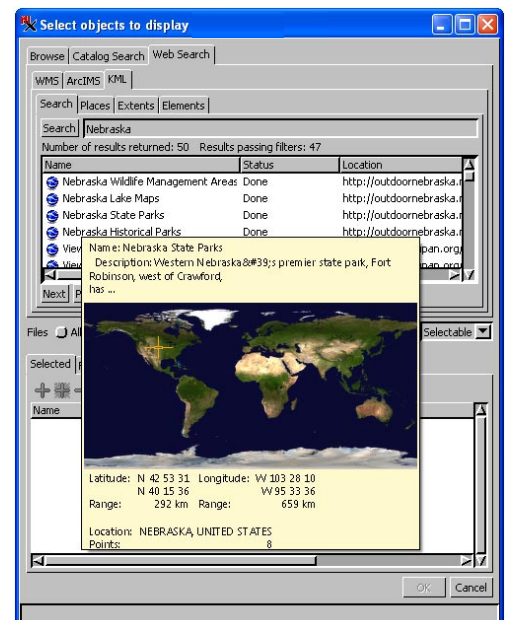
The Search button on the Search panel uses the Google search engine to locate KML files on the Internet containing the text you enter. The search is for all public KML files on the Internet if no text is entered prior to clicking on the Search button. The first 50 of these files are then requested for download to provide additional information, such as extents, description, and number of elements.

The listed KML files are immediately available for display if download was successful. In addition to the Status, Name, and Location columns, which are generally visible without scrolling the result list horizontally, the description, author, number of elements, and layer extents are provided if available.

Result Status and Colors. Unlike the web searches for WMS and ArcIMS layers, which make use of catalogs generated and maintained by MicroImages, the search for KML files is conducted directly throughout the Internet when you press the Search button. First enter the text you want to search for then click on the Search button or you can click on the Search button without enter-

ing any text and the parameters defined on the Extents and Elements panels will be applied to filter the downloaded results without regard for text contained in the file name or description. The Status column in the search results indicates whether the KML download is done, is in progress, passed any entered filtering parameters, or an error occurred while trying to download the file. KML files are generally small and you may not see the downloading status at all. While a file is downloading, it is shown in green; files that have been successfully downloaded are listed in black; and files that result in an error on download are shown in red. If a file is successfully downloaded but does not pass the filter parameters you entered on the Extents and/or Elements tabbed panels, it is shown in orange. You get the same number of KML result files whether or not you are applying filters. The KML file must be downloaded before it can be evaluated to see if it meets the filter criteria (see the later sections on the Extents and Element panels).

Result DataTips. When you pause the mouse over the Status or Name field of a search result, you get a DataTip that graphically indicates the location of the data on the globe as well as all the information provided in the results row. In addition, the range (distance determined from these extents in the



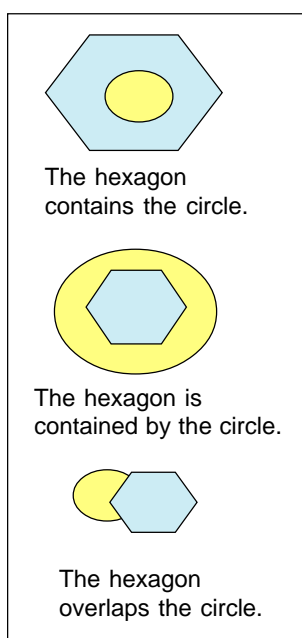
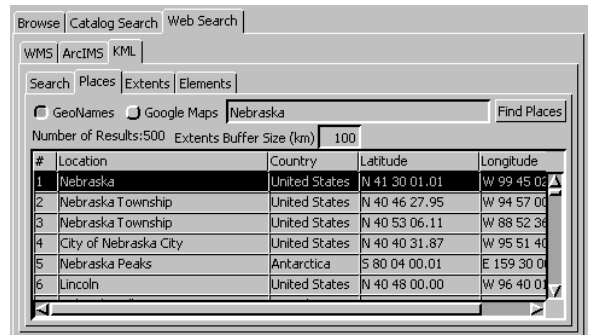
N-S and E-W directions) and the state or province and country the file represents are provided with the graphic DataTip. When extents information is not included in the KML file, the global graphic and other extents-related information (range and state/province and country) is not provided.

Search results are saved as temporary KML files in the same location as your other temporary TNTmips files (see the Quick Guides entitled *Manage TNT Temporary Files in Windows* and *Manage TNT Temporary Files in Mac OS X*). The downloaded KML files not selected for display or other processing are deleted from your temporary directory when the Select Objects window is closed.

As mentioned earlier, 50 KML files are requested for download at one time. You can get beyond this initial set of 50 using the Next button below the list of returned results. The next set of 50 KML files found is then downloaded and listed. Note that above the listed results, the number of results returned is provided along with the number of those results that passed the existing extents and elements filters.

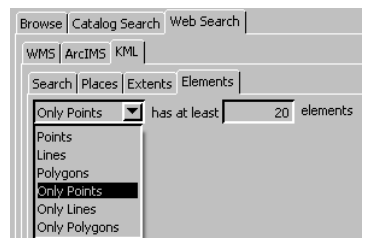
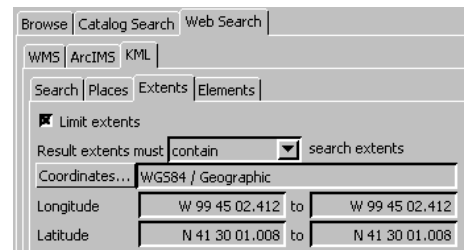
Places Panel

You can use the GeoNames or Google Maps databases to search for place names by choosing the desired one on the Places tabbed panel. The GeoNames and Google Maps searches return point locations identified by the entered text, and you indicate how large an area around that location you want (in the Extents Buffer Size field on the Places panel). A buffer size of 100 km means the shortest distance to each of the sides of the extents rectangle is 100 km from the point location provided, which means the extents rectangle is 200 km on a side and centered on the point for this example. The coordinates on the Extents panel are automatically filled in using the point location and buffer size when you select a place from the listed GeoNames or Google Maps results and the Limit extents toggle is automatically turned on. You then return to the Search panel to download any KML that match your extents filter. If no text is entered, search results will be limited only by the designated extents.



Extents Panel

When you turn on the Limit extents toggle, the fields for defining geographic extents become active. If you have used the Places panel to search for geographic names in the GeoNames or Google Maps database, the extents are automatically filled in based on the selected entry and the buffer size and the Limit extents toggle is automatically turned on. There are three choices for limiting the extents of your desired results: contain, be contained by, and overlap. *Contain* means that the extents shown in the *Select objects to display* window are larger than or equal to the extents of the KML file (search extents are fully inside result extents). *Be contained by* means that the KML extents must be less than or equal to those shown in order to pass the extents filter (result extents are fully inside search extents). *Overlap* means that if the extents of the KML file fall anywhere within those shown on the Extents panel, the KML file will pass the extents filter. You can choose to have your search results match the extents of the current view or the active group. You can also enter other extents for layer location.



Elements Panel

Use this panel to filter for a minimum number of elements in the KML files that result from your search. You can also indicate whether the found files should have only one element type (for example, Only Lines) or may have a mix of element types. When allowing a mix of element types, you enter the minimum number for the designated element type and the number of elements of other types is unlimited.

With these element settings only KML files with a minimum of 20 points that contained only points (no lines or polygons) would be listed in black.