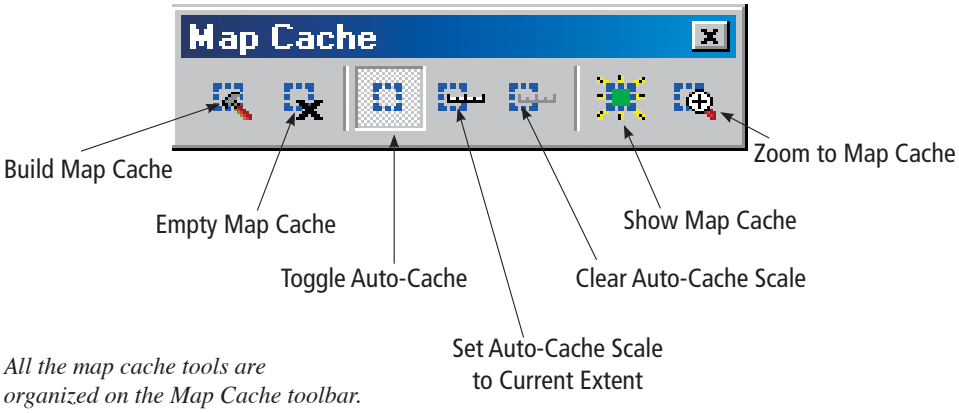
Be More Productive with **Map Cache**

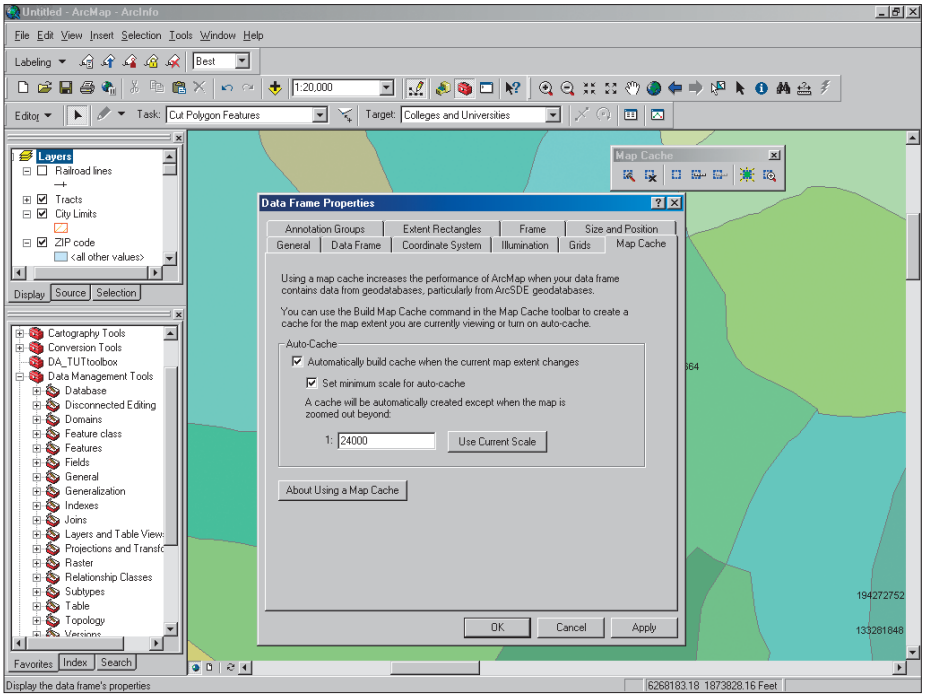
When working with data stored in a geodatabase on a network, many common mapping tasks can be completed more quickly by using a map cache.

With a map cache, ArcMap stores the features from an extent locally. This means tasks such as editing, selecting, and retrieving features with a definition query can be accomplished without taxing the network. In particular, performance when labeling can be enhanced because this activity requires multiple round-trips to the geodatabase as the label engine optimizes label placement.

Map cache works only with data stored in geodatabases and is only beneficial when working in a specific area and on a geodatabase that is not local. Map cache also does not work with rasters. The advantages of storing an extent locally are negated if frequent panning or zooming is required. In addition, building a map cache for a large extent with many features can consume a large amount of both RAM and time.



All the map cache tools are organized on the Map Cache toolbar.



Use the auto-cache to avoid the need to stop and periodically rebuild the map cache. However, make sure the auto-cache minimum scale is set to avoid accidentally adding the entire geodatabase to the map cache.

The tools for using the map cache are located on the Map Cache toolbar. Choose View > Toolbars from the Standard menu to display this toolbar. Zoom to the desired extent, and click on the Build Map Cache button.

To keep the map cache updated without having to stop and rebuild it when venturing outside the current extent, set the auto-cache. However, make sure the minimum scale is set to avoid accidentally rebuilding the entire geodatabase. For example, setting the minimum scale at 1:24,000 will trigger cache rebuilding if the map is zoomed to 1:15,000 but not if the map is zoomed to 1:40,000. Set the auto-cache by choosing View > Data Frame Properties. Click on the Map Cache tab and check Automatically Build Cache When the Current Map Extent Changes and Set Minimum Scale for Auto-Cache. Type in a minimum scale or click the Use Current Scale button.

Quickly return to the map cache extent by clicking on the Zoom to Map Cache button. The Show Map Cache button is green when working within the map cache extent and red when working partially outside that extent. When working entirely outside the map cache, the button is unavailable. Empty the map cache by clicking on the Empty Map Cache button.

Intelligently and systematically applying the map cache can significantly improve the overall performance by reducing network traffic through cutting down on the number of queries run against the geodatabase.

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