

Publishing a Seamless Map on the Internet

Topographic, geologic, planimetric, and other types of maps are commonly published at standard scales and map sheet sizes as PDF, TIFF, shapefile, and other popular formats. TNTmips can convert individual maps or sets of maps from these sources into a seamless web tileset structure for fast viewing via the Internet in Google Maps and Bing Maps 2D and 3D. Only a single tileset is needed for use in any of these popular and familiar Google and Microsoft map viewers. Standard web tilesets can also be created for fast viewing in Google Earth or NASA World Wind. Publishing your map tileset created in TNTmips requires no special web site services, no special downloads, no special licensing or recurring charges. It's simply your tileset accessed from your standard web site.

TNTmips creates a standard web tileset that can be viewed in Google Maps and Bing Maps 2D and 3D using Internet Explorer, Firefox, Safari, Opera, and Chrome. It also creates sample HTML files to immediately view the tileset from your local drive or from your web site in any of these browsers.

Individual map sheets, mosaicked maps of an entire nation, or local project maps can be assembled into a standard tileset in TNTmips. All of the maps of differing scales in a series (e.g., 1:25,000, 1:50,000, 1:250,000, 1:1,000,000) can be combined with appropriate viewing scale controls into a single tileset. TNTmips can produce tilesets matching the structure published by Google and Microsoft for use via their web interfaces, browser plugins, and downloaded desktop programs (e.g. Google Earth and World Wind). Thus a tileset can be viewed and manipulated by anyone in any popular browser (Explorer, Firefox, Safari, Opera, ...). Simply post the tileset in your web space and post the standard HTML or KML link file created by TNTmips with every tileset.

TNTmips is a fully-featured geospatial analysis system, and it is unlikely that you would need any other product to complete your map conversion and publishing. You can start with your maps in almost any form and end up with a fast, easy, public presentation of your complete map coverage as a single map or as individual sheets. Some typical map formats that you could use as starting-points for creating tilesets in TNTmips include: 1) TIFF files containing ungeoreferenced scans of each published map in its original map projection along with the map borders and annotations; 2) map layers as CAD, shape, or other geometric format with or without georeferencing; 3) georeferenced PDF files that have each map theme as a separate raster or geometric feature layer. TNTmips has been commercially available for 25 years and has evolved to enable you to start with any of these map materials and prepare them into a standard web tileset structure for fast public web access or for your proprietary in-house use via a virtual private network.





These illustrations show various browser views of a standard web tileset created in TNTmips from a mosaic of 32 individual 1:250,000-scale shaded-relief topographic maps covering all of Afghanistan and published as PDF files by the United States Geologic Survey. These PDF files were converted to PNG files, then georeferenced in TNTmips prior to conversion to a tileset in the Auto Mosaic process in TNTmips. The two views above illustrate this single standard web tileset zoomed out in Microsoft Bing Maps (above left) and zoomed in to the full map resolution in Google Maps (above right). The illustration to the right shows a 3D view of the same map tileset in Bing Maps 3D.