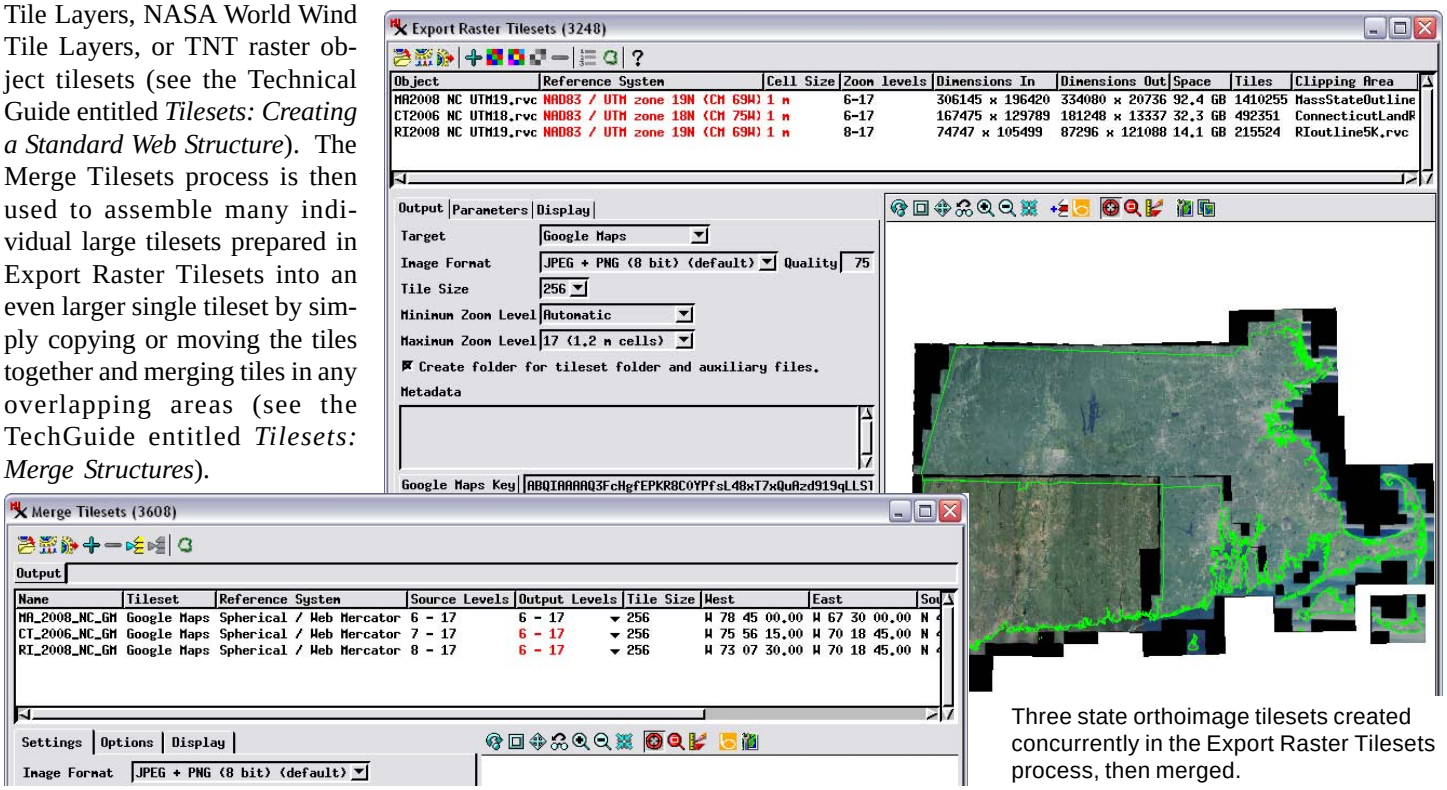
Assembling Very Large Structures

The Export Raster Tilesets and Merge Tilesets processes are designed to work together to efficiently assemble very large standard web tilesets. Export Raster Tilesets exploits your system's multiple processor cores and the TNTmips Job Processing System to convert multiple orthoimages or other rasters into Google Maps Tile Overlays, Google Earth Super-Overlays, Bing Maps Custom Tile Layers, NASA World Wind Tile Layers, or TNT raster object tilesets (see the Technical Guide entitled *Tilesets: Creating a Standard Web Structure*). The Merge Tilesets process is then used to assemble many individual large tilesets prepared in Export Raster Tilesets into an even larger single tileset by simply copying or moving the tiles together and merging tiles in any overlapping areas (see the TechGuide entitled *Tilesets: Merge Structures*).



Three state orthoimage tilesets created concurrently in the Export Raster Tilesets process, then merged.

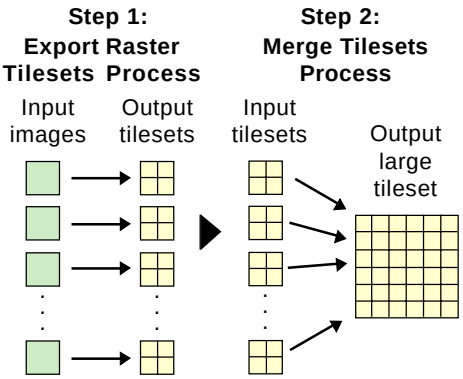
Job Processing

The Export Raster Tilesets process allows you to take advantage of the concurrent processing capabilities of your computer's multiple processor cores using the TNTmips Job Processing System. You can set up many tileset creation operations at one time and use the Queue Jobs icon button to immediately queue each of the tileset conversions as a separate job or the Save Jobs icon button to hold these jobs for later release. The TNTmips Job Manager allows you to set the number of jobs that can run concurrently and to manually manage the job list or to set up regular scheduling for job execution (such as overnight or weekend processing). See the TechGuide entitled *System: TNT Job Processing System* for an introduction to job processing.

Export and Merge Tilesets versus Mosaic

The Auto Mosaic process in TNTmips can also be used to create your final large tileset directly from multiple input images. It has the added capability of precisely controlling how image overlap areas are processed. However, producing a very large tileset from many large input images is slower than the 2-step sequence of Export and Merge tilesets. Mosaic runs as a single process and the input images are processed one at a time. In contrast, using job processing in Export Raster Tilesets allows you to process 2, 4, 8, ... images concurrently. The 2-step procedure is much faster when applied to a large collection of images that are ready for assembly into a final large tileset, even a global tileset.

The most efficient procedure to create very large tilesets uses the Export Raster Tilesets process to convert each input orthoimage or raster into a separate tileset using Job Processing. Export Raster Tilesets allows you to set up many tileset operations at once and run them as concurrent jobs on your multicore system, providing efficient production of very large, even global, tilesets. The Merge Tilesets process then merges these individual tilesets into the final very large tileset.



The Auto Mosaic process can also be used to create a large tileset from a large collection of input images. However, this is slower than the 2-step procedure since the mosaic runs as a single process with no concurrent processing of the input images.