



13 September 2006

TNTserver 2006:72 Addendum 1

Using TNTserver in Test Mode.

The MicroImages MEMO of 23 August 2006 recommended that your first installation of TNTserver use a local portable or general purpose computer and a TNTserver test key. This was to insure that you did not compromise your web site while learning how to set up a Web Map Service. This initial approach to learning how TNTserver works and is managed has several advantages.

- It uses only local communication between TNTmap and TNTserver through Apache or Microsoft's Internet Information Services (IIS) and does not expose your initial efforts to the complication and vagaries of the Internet.
- It provides immediate access to the geodata content prepared in your TNT Project Files and other supported formats.
- You will understand how a TNTserver operates even if your web site and perhaps this TNTserver will be hosted by someone else at another location.
- You can test each updated TNTserver and TNTmap without interrupting your existing TNTserver installation.

However, that MEMO failed to mention that 2 USB keys of the same type (for example, 2 Hasp keys or 2 of the earlier Sentinel keys) cannot be used on the same computer. When the product keys for a TNTserver and a TNT analysis product (TNTmips, TNTedit, or TNTview) are attached to the same machine, the USB driver can not distinguish between them. This is a security function of the driver provided by the manufacturer of these USB devices. The result is that TNTserver might find the TNTmips key first and report that TNTserver cannot be started since the TNTmips key does not authorize it or vice versa.

Revised Access to Test Version.

Early reports from those encountering this 2 key problem pointed out that this was not made clear in the 23 August MEMO. These reports prompted MicroImages to review the objectives of providing a test key.

Objective 1. A test key should be used on an "off-line" computer to experiment with TNTserver.

Objective 2. The professional TNTserver key used to publish your WMS on the Internet or your intranet should not be used to run any other software.

- All the resources of any server, and TNTserver in particular, should be available to serving the public purpose for which it has been published!
- Operating any other unrelated application software on the server may compromise the computer and, thus, the reliability of your WMS.

Upon reflection, a simple method for meeting these objectives was obvious. Simply permit the software authorization key for any current TNT analysis product (TNTmips, TNTedit, or TNTview) to automatically run TNTserver 2006:72 in the test mode. Now, as a result of this change, any MicroImages' client can try the test version of TNTserver under the following conditions.

- Your TNT analysis product key must be at the same version or a later version than the TNTserver you are installing, in other words, if you are installing TNTserver 2006:72, your TNT analysis product must be version 2006:72, 2006:73, or later.
- You install Apache or Windows IIS on the computer to be used for this test TNTserver.
- You download a version of TNTserver 2006:72 dated 11 September 2006 or later.

Experimenting in Test Mode.

Once you have installed a local TNTserver in test mode you can experiment with using your TNT objects and other geodata files as layers, layouts, or atlases in TNTmap. Even though you have not published your test layers via a web site, TNTmap can illustrate how they can be combined with the image, map, and location identification features provided by Google Maps, Google Earth, World Wind, TNTmap Viewer, and geodata from other sites providing Web Map Service layers. For example, Google Maps powerful address search can be used to automatically combine your test layers with its map layer(s) or Google Earth can be launched to zoom to and use your layers as its temporary layers. The attached color plate entitled *TNTserver 2006:72: Using in Test Mode* illustrates the use of the test version of TNTserver and TNTmap in this fashion. Please monitor the new color plates posted at microimages.com/product/tntserver72.htm over the next couple of weeks to review these final features being perfected for TNTmap 2006:72.

More United States Image Coverage.

Recently you were provided with a DVD containing a sample Nebraska Land Viewer Atlas 2nd Edition using a 200:1 Nebraska 1-meter, natural color image as a single, multi-file raster image (3 GB image). This same atlas is available as a WMS demonstration from microimages.com/TNTmap. It can be viewed in TNTmap using the TNTmap Viewer or its Google Maps extension or projected into Google Earth or World Wind. The Nebraska multifile raster object used in this WMS version of the atlas is JPEG2000 compressed only 20 to 1 (30 GB) since the time to access a multifile raster in TNTserver or the TNT analysis products is independent of its size. This means that the WMS version of this image, since it is not constrained to the size of a DVD, preserves more spatial detail.

The more layers you put into your atlas, the longer it will take TNTserver to combine them and return the composite view to TNTmap or any other WMS compliant viewer. The Nebraska 2nd Edition atlas has 11 layers. The 1-meter, 20:1, color, multifile raster image of Nebraska it uses is also published as a single WMS layer without any overlays for faster use as an image base in Google Maps, Google Earth, or World Wind.

At the present time MicroImages is downloading high resolution 1- or 2-meter image coverage of some other states to present as base images for use in the demonstration of TNTserver and TNTmap. This involves downloading the DOQQ or county-sized image units from each state's web site (a slow process) in MrSID, ECW, JPEG2000, or JPEG formats. These are then used directly as input to mosaic to prepare the single,

uncompressed image coverage of the state. The mosaic is exported to a single 15:1 or 20:1 JPEG2000 multifile raster image. TNTserver Manager is then used to directly publish this layer.

At the present time 2-meter, natural color image coverage of Kansas and Missouri have been added to MicroImages' TNTserver. 1-meter image coverage of Florida, Iowa, Mississippi, and Minnesota has also been downloaded. Similar natural color or CIR image coverage of other states is available for possible use.