MicroImages MEMO
Information update for the **TNT products**

1 March 2009

Testimonials and other Tidbits (2008:74)

The following are some of the complimentary written comments and related interesting items received at MicroImages since the shipment of version **2008:74** of the TNT products exactly as provided except for the comments and edit alterations [shown in brackets] to keep them anonymous where necessary. Additional favorable comments are received by MicroImages by voice but cannot be reproduced here verbatim as quotes. Please note that these quotations are not edited from their original form in spelling, grammar, punctuation, and so on, and many are written by those whose first language is not English.

MicroImages clients using TNT professional products

Editing 10 times faster

email from Australia on 17 March 2008

I have obtained an ALOS DEM (5m spatial/2-3m vertical) accuracy to use in anaglyph mode with a 1m orthophoto. The scene has many lakes and initial trials of mapping around these using the WACOM suggest a >10x improvement in speed over a mouse. I have used the anaglyph mode for mapping escarpments reasonably well, but have still to have time to devote to this mapping project.

[These comments refer to sketching and editing on a stereo TNT view directly on a Wacom Cintiq 21UX pen display. This is high quality 23" flat panel monitor that supports direct drawing on its surface with a stylus that can be used in place of, or in addition to, a mouse. More information on the use of this display device for the TNT products can be found in the TechGuide entitled *Creating Geodata Using a Pen Display* at www.microimages.com/documentation/cplates/74PenDisplay.pdf.]

Moving to 64-bit Mac OS X

email from Norway on 22 April 2008

Thanks! I downloaded the 16 April patch last week and got it working—very nice (and fast).

[Client was notified by email that the native 64-bit version of TNTmips for Intel Mac OS X 10.5 was now available to download.]

Appreciating MicroImages' web site

from email from Australia in April 2008

With the web in mind, we have all been impressed with the new look and feel of the MicroImages website. It continues to improve in quality and professional appearance, and the new navigation capacity from the home page is very good.

Support for a shark

from email from Canada 10 July 2008

I did not need updates from windows—I am on that like a shark. However, I did not have windows media player and that seemed to provide the driver needed to run TNT. Display/Import/Export dialogs popped up when I clicked on them. I am sure everything will now run. Thank you so much for researching that problem, now I can get back to work.

[problem was a missing library]

Scripting makes money

from email from Germany, 14 July 2008

[discussing a modified SML feature]

I intend to write some tool scripts to semiautomatically manipulate vectors for a water project with hundreds of thousands of vector elements to check or manipulate. …

OK, we first have to win this tender, but in case, every task must be carried out really quickly (time is money) and without SML we would not be able to do it.

Switching TNTmips from 32-bit to 64-bit Mac OS X

from email from Australia in July 2008

I must admit I am VERY impressed with the 64-bit version of TNTmips. I run it on a Dual-Quad MacPro [i.e. 8 Intel cores] with 16 GB RAM it really flies. I am also an ENVI/IDL user and will probably stop using this software and move totally into TNTmips. I just love the way you can flip from a window to Google Earth as well—really cool!! As a test of the 64-bit version I ran Watersheds on the SRTM DEM of Australia and TNTmips completed the job in hours extracting watersheds and drainage lines at 250K-scale. I have never been able to do something like this before.

I am a very happy TNTmips user at the moment.

[additional comments from the same party above but directed to a long time TNTmips user who recommended the package]

I downloaded the 64bit version of TNTmips on the weekend and it's AWESOME!!. The performance improvements are amazing and the ability to process essentially any size data sets is mind blowing. It is incredible to play around with the global SRTM data set you gave me in realtime!!

Thanks for letting me know it was available—will check the TNTmips site more regularly.

PS. I was able to extract all the watersheds for Australia in a few hours processing although I am going to re-do it with salt-lake mask and even smaller basin sizes.

Trying TNT support for the first time

from email from Australia in July 2008

[This is a comment from a Geoscientist using MicroImages' technical support for the first time.]

Jeez these guys are good!! – Bugs that I have reported in ENVI/IDL 2 & 3 years ago still haven't been fixed!! Cheers.

Editing is wonderful

from email from JAPAN on 22 July 2008

Mr. [a name] told me to convey to MI that the current shortcut-key support and enhancement of editing (such as dragging node and vertex dynamically) in 2008:74 is wonderful.

Siting rainfall stations

TNTtalk from Australia on 25 August 2008

I finally am starting to get around to this! I like the MCDA [Multi-Criterion Decision Analysis] approach but need to figure out the scoring process. The area in question is quite mountainous so I am using Jack Paris' SML scripts to do terrain correction/improve the fidelity of the TM imagery. Ideally we want to place our stations on exposed bedrock so intend using a bare soil index for identifying good sites. Once I am done I will report back on results. I am having fun doing this but am rusty with regard to TNTmips skills.

Very pleased with performance

from email from the USA on 7 October 2008

I would like to inform MicroImages staff and management that we are very pleased with the performance of version 2008:74. According to my tests with some of the SML scripts [TNT's geospatial scripting language] used in our production environment, version 2008:74 is up to 50 percent faster than version 2007:73. This is a significant increase in the efficiency of the TNT products. It is great to have the increasing power of MicroImages products in our spatial data production shop.

I am suspecting this improvement is possibly due to raster caching, as the % benefits increase proportional to the raster dimensions. Also, the speed comparison above does not include potential benefits of new SML features such as pipeline processing; it is simply old code [i.e., 2007 code] working with the new version.

I am planning to have the entire production team start using version 2008:74 early next week and integrate pipeline stuff to our processes over the winter.

[This commercial organization uses multiple TNTmips stations and a chain of SML scripts they have developed to perform complex processing and spatial analysis steps each night on satellite imagery collected that day. This processing flow must keep up with the daily flow of images covering a large geographic area. Processing throughput must be continuous as daily decisions are made based upon the results.]

Fastest mosaicking

from email from Australia on 8 October 2008

[A name] has just completed a major Landsat processing exercise (112 scenes) and is about to embark on another (77 scenes, 3 processing techniques: principal components, decorrelation and standard color composite). She is considering getting a machine with 64BIT processing capability to do this and I know she is also looking at multi core functionality. She was previously a big ENVI user, but has learnt the error of her ways and is steadily learning and seeing the power of MIPS. When it came to stitching all the images together ENVI was taking days and MIPS managed it in a few hours.

[The feedback to this client was to buy an 8-core computer to take advantage of the parallel job processing being introduced in TNTmips 2009 and to try the results of mosaicking the 112 into a TNT tileset.]

From MicroImages Resellers

Faster conversion to PDF

email from a International Reseller, 21 April 2008

The [new] "Render to PDF" option in Display is very useful. The TNTmips method to render to PDF is now far better than the ESRI option as it gives to operator a choice of coordinate accuracy. The TNTmips Render to PDF is also very fast.

The whole team loves that

from FAX from an International Reseller in May 2008

I guess I've already started extolling the virtues of the software above, however we are all settled in with 7.4 now and enjoying it greatly. The first release we ran was good, but we had some script performance issues that were quickly resolved with a newer patch. Everyone commented on one of the simplest features—having the reposition tool default in the displays. The whole team loves that and one is left with the feeling the display function is easier to use all round which is an interesting comment on how ingrained the reposition type tool is in spatial software in general.

Performance benchmarks show us more improvement again with 7.4 and that's great. … Other than that we couldn't be happier. All our current processes work flawlessly and it seems one of the most error free and stable releases yet. Congratulations!

Few systems actually integrate spatial data

from FAX from an International Reseller in May 2008

While in Australia I spent some time at the CeBit conference in Sydney and found that an interesting experience. What continues to surprise me is the lack of use of spatial data out there. Various people are adding Google mash-ups to their systems to give the impressions of spatial, but it seems the wider business community still doesn't have their head around it. The good thing about that is that the opportunities are great in this area, especially where TNTmips is concerned. I guess one of the key points is that those who have tried going spatial have had no real success by a combination of not knowing what it is or what they want and the levels of investment required to implement spatial data in house. To this end many seem to have tried ArcGIS on the desktop with little success, and the single biggest barrier being the masses of data, but in no standard format. When faced with that with only ArcGIS on hand, you'll never get past the fact that it can't pull all the data together.

It's hard not to get evangelistic about TNTmips and its remarkable capacity for dealing with almost any type of data. Then if you can deliver the data you integrate via one distribution channel (TNTserver) that also gives much flexibility in output to varying clients, it all suddenly seems easy. Supplying that capability to businesses without requiring GIS professionals in-house continues to be an ideal option, especially given clear returns on the bottom line. Makes one wonder why there aren't more people doing it. Then again, could you if you didn't have a TNTmips? I think the answer is right there – if you are trying to use MapInfo or ArcGIS to do this, how do you deal with so many types of data when you can only import/export or link to a select few data types? Simple, you can't without developing your own tools to do so, raising the costs and dropping the returns, let alone the impacts on time to roll-out, etc.

I've said it before and I think visiting thousands of system builders displaying their wares has highlighted once more that the flexibility afforded by TNTmips and the other products opens a big market opportunity, one we will certainly continue to follow.

Discussing a spatial vehicle management system

from FAX from an International Reseller in May 2008

Overall, it's looking good and is nearly ready to be treated as a package for resale. However, we need to consider the components of that and the scale of the system. [Our first installation] experience has shown us that hardware and software need to be well balanced to make a successful implementation. At present the system is running on two large servers, one doing the web serving and one providing the data and running back-end processes. One TNTserver distributes all to the clients, and that is working hard but performing admirably. Having said that we are pushing a lot of data per day, and once the system is rolled out to all end users, there is a realistic need for separate servers per region. That may seem somewhat over zealous, but controlling cached data and its advantages to rich-client apps is important with semi real-time data. Processing via TNTmips is excellent, but even on a decent processing machine the amount of overnight processes really need to be split amongst multiple machines by task. Realistically an ideal spec for a [name] style system for one of the large [national] companies would be 5 -6 TNTservers and about the same of TNTmips.

Switching a TNT shop to Mac OS X

from FAX from an International Reseller in May 2008

We have also been working out our hardware pathways and have taken stock of your earlier thoughts and will be moving our primary developments and GIS processing to Macs over future cycles. We are maintaining our Sun partnership for database servers and java development tools, and their recent acquisition of MySQL also fits our picture nicely. We no longer rely on Windows interoperability with clients, particularly when systems are delivered as managed services. Of course Windows remains present for TNTserver and the like, but is certainly facing a diminished capacity going forward. [A name] out lead development chap is arranging new MacBooks for the development team with quicker processors just released. We will finally start seeing iPhones here by the end of the year, at which point we will finally be able to get further mileage from the iPhone demo of yours. Where we have shown it in presentations [using the browser simulation at microimages.com/iTNTmap/simulate.htm] the inevitable question of 'can we get that now' arises, so being able to say yes will be grand.

In the meantime TNTmips 2008:74 is looking good. We are impressed with speed in general, though we have had some speed issues at random during script processes. … I've noticed that the graphics acceleration issue with the windows desktop background has disappeared, meaning a really good look for demonstrations, and in general there's a nicer feel to the interface with menu fonts, buttons etc. looking the same across all machines. Oddly in previous versions there have been minor differences machine to machine with no apparent source so it's looking good.

TNTmips 2008 more intuitive

from email from an International Reseller, 11 July 2008

By the way, in my opinion, the 7.4 version made TNTmips more intuitive, versatile and especially more robust. I appreciate especially the improvements in the following areas: dis-

play, inline image filtering, spatial data editor, mask, buffer zone and tile creation, PDF rendering and applying JPEG2000 compression in pyramid layers.

Responding with new features

from email from an International Reseller, 27 August 2008

I appreciate this and pointed out to [our client] that none of the other software developers would come close to this level of responsiveness.

[regarding a request for a new feature from a TNTmips user]

Building systems with Macs and iPhones

from email from an International Reseller, 6 November 2008

We are currently awaiting delivery of our new laptops which are all to be the latest MacBook Pro's, even though I am also considering a MacBook Air for traveling. [A name] here has been doing fairly extensive testing on Mac servers and a contract we are trying to secure at present will be our first using Mac hardware in its entirety. As we aim to push and pull remote data (sales orders, location data, etc.) to Sales reps, we have specified iPhones as the central component of the business mobility end of the project. The hope is that we will be able to use iTNTmap to advantage in adding mobile map data. That would be outside of scope in the initial phase of the project to give us more time to test and deploy as we haven't spent any significant time working with it in a production environment yet. The iPhone is definitely a good performer for mobile database applications and is a product we will undoubtedly continue to use as a core system component.

Automated vehicle management using NavMan roads

from email from an International Reseller, 6 November 2008

[Note that this reseller application is Automated Vehicle Management (AVM) not the more common AVL—Automated Vehicle Location. It requires that TNTmips systems have access to the licensed road network data used in AVL systems. In a typical AVL system an integrator builds, installs, and maintains an on-truck system with a GPS, operation monitoring devices, a display device, storage, and realtime data communication links. NavMan licenses the current road network and characteristics, a database system, software for viewing truck location and operation. An AVM then further integrates this into a complex spatial system to optimize truck and driver operation, routing, billing, and so on.]

In a question from your earlier fax you asked if the [licensed] NavMan vehicle data was being imported to your [TNT] objects and the answer is yes and it's also acting as a communication platform for other on-truck equipment. The path in requires some data conversion which we use SML to read, tokenwise where necessary and extract the XML data into a point vector. The point vector is then processed by another XML script to re-create the truck's route and an optimal path. At that point various analyses are conducted, ranging from calculation of 'off-road' (private road and property) mileage through to consolidation of activities.

Each piece of NavMan hardware has an attached bit of hardware known as a Connex box in NavMan parlance. Into this Connex unit we have plugged some engine management systems, load lift hardware, hubometers, Mobile Data Terminals etc. Where the source components have formatted data we just add the data as columns to the attribute table. For others like load weights we get a single column with a data string of set format. In those cases we tokenize the string in SML and break it out into columns with the appropriate data in each. Thus all data is managed as vector objects from arrival.

Using TNTserver's Web Feature Service

from email from an International Reseller, 6 November 2008

> We have in the last few days been running connections tests to the WFS from MapInfo and Quantum GIS to see how they perform and we've noticed that some layers are not considered valid in software when the likes of uDig, TNTmap and others have no issue. We've been doing this primarily to broaden our own experiences with connectivity for an envisaged public service. Our feeling at this point is that both the softwares mentioned just have poor WFS connectivity as they have hurried out the features without any significant beta phases, but we'll report back if we don't get any resolutions from the testing.

Comments on the use of Citrix

from email from an International Reseller, 6 November 2008

> In terms of Citrix deployment, the limits on that are essentially to do with colour on screen. As Citrix does a maximum of High Colour graphics [compression] one sees a 'washing out' of colour sets, but when one themes on a variable with many classes, colours blend a little too much and it can be extremely difficult to see the results clearly. It does appear that issue is at least partially resolved with better colour performance in Citrix's latest products, so it does still represent a good option for low bandwidth use within corporate infrastructure.

From TNTlite users

Wonderful GIS software

email from India on 20 April 2008

> I am in touch with your dealer in India and will process the purchase through him. I have used TNTlite extensively and had some sample data a few years ago. Thanks for a wonderful GIS software which I can now finally purchase.
>
> [The FREE TNTlite version of TNTmips is now called TNTmips Free]

Love it

email from Chile on 25 November 2008

> Because I love it!

Very Happy

email from France on 26 November 2008

> thank u for this initiative i m very happy to get this logiciel

Very Good

email from Brasil on 26 November 2008

> very good e this program but I want to know better [how to use it]