

30 January 1994

Release of TNT V4.51 products

Why this Interim Release?

TNTmips 4.5 is holding up well. This makes it possible to identify and fix errors which now remain as corrections no longer produce so many "ripple" effects where an error or change in one process subsequently requires changes elsewhere. This, in turn, allows MicroImages to supply you with custom fixes in individual detailed situations and to rapidly provide everyone with this **V4.51** release. The use of the **CD-ROM** as a distribution media also enables corrected versions to be more rapidly produced and dispatched.

The most significant error encountered to date in **V4.5** for which there is no work-around is in the importation of AutoCAD *.**DXF** files. This import process actually works but is so slow that it is impractical except for small input files. Errors in several other processes are also being corrected with this release as outlined below.

Additional errors have been reported and fixed in detailed specific areas in **V4.5** which have not been repaired with **V4.51**. In general, they have a work-around in **V4.5** and have been supplied directly to the person reporting them. Correcting these additional minor problems such as in the display process, would have required the replacement of most **V4.5** processes which widely share this and other similarly affected general-use features. It is highly likely that this would create more problems than benefits without widespread retesting which is better done in the preparation of **V4.6**. This would also have delayed the shipment of this **V4.51** to the point that it would not have been worthwhile.

Please report other errors in **V4.5** or **V4.51**, one-at-a-time, as soon as encountered and you will usually get a rapid fix. Reporting the problems as early as possible also ensures that these errors are fixed for everyone in **V4.6**. Please realize that saving up a long list of problems and sending them all at once is much more difficult for MicroImages to manage. A simple call or hand written error sheet forwarded by FAX each time a problem is encountered usually gets the potential problem examined immediately on a day-by-day basis.

Installation

The enclosed **CD-ROM** containing **V4.51** is complete and will be the **CD-ROM** shipped with all new orders. The installation process has not been changed from **V4.5**. **V4.51** can be installed just as previously described in the MicroImages MEMO entitled Release of TNT V4.5 products dated 30 December 1993. If you select the directory containing **V4.5** you will find, as usual, that the installation process will check all the files and substructure in the directory, and replace only those few files representing processes which have been changed. Alternately you can reinstall everything in a new directory and try **V4.51** before deleting **V4.5**.

Should the installation of **V4.51** into the same directory as **V4.5** result in the replacement of every process or in messages to the effect that the processes in your

V4.5 directory are "newer" than those from **V4.51**, then you may want to check your system for a virus.

Those still receiving **TNT** products via floppy disks are not being shipped a complete new **TNTmips**. but only those processes which have been changed. Simply use the **RESTORE.EXE** utility on the first disk to decompress and move the processes into your **TNT** directory.

Errors Corrected

Importing CAD Files.

Importing AutoCAD or *.**DXF** files is now orders of magnitude faster. For example, importing a 1 megabyte *.**DXF** file with the **V4.5** process took 24 hours and with **V4.51** take 4 minutes.

Exporting MapInfo *.MDB.

Database records for each element from a selected **RVC** table will be correctly exported for the **MSW3.1** version of MapInfo.

RVFTORVC Conversion.

This conversion process was leaving the new **RVC** Project File locked. It has been modified so that the **RVC** Project File which is created will be unlocked. Please note that we are getting calls about how to unlock Project Files. Please refer to the section entitled File Locking on page 11 of the **V4.5** Release MEMO if you encounter this problem and need to unlock a Project File.

UTM zones in the Southern Hemisphere will now have their false northing correctly converted by this process.

Scanning.

An error was corrected where, under a specific set of circumstances, the scanning process would automatically revert to 75 dpi. It occurred if you selected any resolution before fast preview instead of after. There was an easy work-around for this in **V4.5** provided to those who inquired. You could have reversed the order of the selection of the resolution or reselect the desired resolution after the preview in **V4.5..**

Mosaic.

An intermittent error was fixed which occurred when closing the Manual Abutment Window after selecting to abut the images with a diagonally positioned line. To date, this is the only Application Error (under Microsoft Windows **V3.1 [MSW3.1]**) or Memory Segmentation Error (under Unix) that has been clearly traced to **TNTmips**. Certainly others may be present but can not be pinned down yet to **TNTmips** or a specific hardware installation as they can not be repeated by MicroImages.

Digitizers.

The large format Summagraphics Summagrid IV digitizer is now correctly supported. This change should not affect the operation of any other digitizer.

TNTview.

An error was fixed to allow **TNTview** to access HyperIndex stacks.

TNTdemo.

A non-fatal error was fixed in the installation sequence of **TNTdemo** which required the reissuing of the **TNTmenu** process.

Installation.

The installation process has been corrected to properly install **V4.51** from the **CD-ROM** onto a Unix platform without producing the "Not Authorized" error message in the import/export process.

TNTdemo

The trial use of the **TNT** products via **TNTdemo** has now been formalized and is presented in the attached descriptive materials. Please feel free to reproduce the enclosed preliminary flier, and provide it to those who may ask you about any of the MicrolImages products. This **TNTdemo** flier will be part of a series of four different color fliers we are preparing (along with **TNTmips**, **TNTview**, and **TNTatlas**). Multiple copies of the final color printing of this **TNTdemo** flier will be sent to you with **V4.6** of the **TNT** products in March.

MicrolImages has already distributed several copies of **TNTdemo** under this program. These have already resulted in subsequent purchases of **TNTmips**.

New Features Created for V4.6

TNTatlas.

This new MicrolImages product has been created and is now being tested across all platforms. It will allow the startup of a HyperIndex® stack from an icon on a **MSW3.1**, **MSNT**, or **X** Window desktop and immediately put the user into the index. Only two windows are provided to make the process as simple as possible: the Project File Selection Window and the Navigator Window. It is well to emphasize again that all purchasers of **TNTmips** can install and use both **TNTview** and **TNTatlas**.

TNTmips.

The following features have been added to date for release with **TNTmips 4.6**. Other new features not shown will be added during the next 5 or 6 weeks.

Microsoft NT.

The **MI/X** server and other development work for the release of the **TNT** products for Microsoft **NT** on the Intel and DEC Alpha machines has been essentially completed.

Pin Mapping.

Provides for database queries to directly plot symbols on georeferenced maps and images without requiring that the database records be attached to vector or **CAD** elements.

Styles.

Additional improvements to the user interface and tools to design styles for the visualization of vector/CAD elements have been completed.

Icons.

Some icons have been added to the display and edit tools.

Auto-color Map alias Class CMAP.

The process formerly known as Class **CMAP** has now been simplified considerably and perfected and will be included as part of the 2D Display process.

System Changes.

MicrolImages is now in the process of completing the conversion of the C compiler used with the Microsoft Windows **3.1** version of **TNTmips** from WATCOM C version **9.0** to version **9.5** to allow for optimization for the 586 processor for release with **V4.6**.

AUW6

The annual Advanced Users' Workshop 6 was successfully completed with attendees from around the world. Those who did not attend **AUW6** will receive a copy of its program and the suggestions contributed by those in attendance for improved or new features in **TNTmips**.

TNTmips 4.5 was used continuously for 3 days in a demonstrational mode on a Gateway 2000 microcomputer using a 586 processor. Only 4 Application Errors were encountered during the 3 days. Three of these were caused by using post **V4.5** development versions of **TNTmips** to demonstrate new features. These Application Errors could not be reproduced in **V4.5**. The remaining Application Error occurred in the Mosaic process, and is corrected with **V4.51** as noted above.

During **AUW6** there was a demonstration of the **DEC Alpha AXP PC** (150 megahertz processor) running **TNTmips** under Windows **NT**. At the time it was compared with a Gateway 586 based system running **TNTmips** under **MSW3.1** and found to be slower. No explanation for this result was available at the time. Subsequent to **AUW6** it was discovered that the test **TNTmips** processes used on the **DEC Alpha** machine had many test and diagnostic code lines embedded. Undoubtedly, this reduced performance significantly. Thus, at this time, the results of this earlier comparison should be disregarded. When these diagnostics are removed, MicrolImages will be in a better position to comment upon the relative speed of **TNTmips** on the 586 versus Alpha based **PCs**.

Display Boards

The latest test comparison charts for **MSW3.1** accelerator display boards are included from Byte magazine.

The chart for the Matrox display boards (included on page 24 in the MicrolImages MEMO entitled Release of **TNT V4.5** products) has some minor errors in performance and is corrected and reproduced again below. Please also note that Matrox has continued to lower the prices on these boards so that the sample prices shown for some models may no longer be applicable.

Matrox MGA Impression 3AH (3 mb VRAM , ISA bus therefore EISA bus) top resolutions B, E, G, I	\$1000
Matrox MGA Impression 3MH (3 mb VRAM , MCA bus) top resolutions = B, E, G, I	\$1100
** Matrox MGA Ultima 2AH (2 mb, ISA bus therefore EISA bus) top resolutions = B, E, G, J, L	\$700
Matrox MGA Ultima 2MH (2 mb, MCA bus) top resolutions = B, E, G, J, L	\$900
Matrox MGA PCI2 (2 mb, PCI bus) top resolutions = E, G, J, L	\$600
** Matrox MGA PCI2+ (2 mb PCI bus) [can be expanded to 4 mb VRAM]	\$700

top resolutions = B, E, G, J, L	
Matrox MGA PCI4 (4 mb, PCI bus)	\$1000
top resolutions = A, F	
Matrox MGA VL2 (2 mb, VL bus)	\$600
top resolutions = E, G, J, L	
** Matrox MGA VL2+ (2 mb VL bus)	[can be expanded to 4 mb VRAM] \$700
top resolutions = B, E, G, J, L	
Matrox MGA VL4 (4 mb, VL bus)	\$1000
top resolutions = A, F	

Only highest resolution at maximum colors are listed in the above board list. Lower resolutions at that color resolution can also be used.

- resolution A 1600 by 1200 pixels by 16-bit color
- resolution B 1600 by 1200 pixels by 8-bit color
- resolution C 1280 by 1024 pixels by 24-color
- resolution D 1280 by 1024 pixels by 16-color
- resolution E 1280 by 1024 pixels by 8-bit color
- resolution F 1152 by 852 pixels by 24-bit color
- resolution G 1152 by 852 pixels by 16-bit color
- resolution H 1152 by 852 pixels by 8-bit color [standard Sun SPARCstation display]
- resolution I 1024 by 768 pixels by 24-bit color
- resolution J 1024 by 768 pixels by 16-bit color
- resolution K 1024 by 768 pixels by 8-bit color
- resolution L 800 by 600 pixels by 24-bit
- resolution M 800 by 600 pixels by 16-bit
- resolution N 800 by 600 pixels by 8-bit

** At this time Microlimages recommends these Matrox boards as the best overall performance and cost for **TNTmips**. This is, of course, subject to change at any time with the continuous introduction of new **MSW3.1** display boards at progressively lower prices.

News Items and Brochures

A Short Form Catalog on the Tatung Workstations which clone the Sun Sparcstations is enclosed with this shipment. Microlimages has one of these Tatung Workstations it completely compatible with the corresponding Sun product. We also have several of their X-terminals. Generally, you will find that these Tatung clones can be purchased at least 20% cheaper than the corresponding Sun product, regardless of what kind of price discounts you might already receive from Sun.

A short article is enclosed from Windows Magazine entitled Even a Pentium isn't fast enough for me - not by a long shot.

Another article from Aviation Week is included on the saga of who is going to control and supply the next generation of remote sensing satellite imagery. It also contains a forecast that the GIS market will expand this decade to US\$8 to \$15 billion. Maybe this is a good reason why we should all continue to go to all this trouble. Unfortunately, pioneers often get arrows in their backs.

