Changing Languages (Localization)

in the

TNT Products

Before Getting Started

This booklet surveys the steps necessary to localize the TNT products. Micro-Images has worked hard to **internationalize** the TNT products so that they may be **localized** for any country, culture, and language. MicroImages does not create translated versions of the TNT products, but it does supply the means so that those who have enrolled as Official Translators can create a localization. A localization can use any font, so that none of the original English words or Latin characters remain. Alternatively, an Official Translator may choose a less ambitious level of localization and translate only selected interface elements, leaving the rest in English. As an Official Translator, your localization efforts can put you into a unique leadership position in your country. Contact MicroImages for details of the Official Translator agreement.

Prerequisites To implement a TNT Products localization, you must
- enroll with MicroImages, Inc. as the Official Translator for your language,
- be a skilled computer user who is comfortable with both the English version of TNT and the target language for your locale, and
- be familiar with the TNT processes, since your localization task includes finding linguistic and conceptual equivalents for all interface text, messages, and documentation.

MicroImages encourages you in your localization efforts. Already the growing list of completed localized versions has made the TNT products ever more widely accepted around the world.

The Locale A **Locale** is defined by the *textres* file that contains all the information needed for a specific translation so that all the text in the TNT interface appears in another language. All current locales are provided on the TNT products CD. The latest locale additions and revisions are posted on the MicroImages Web site. Contact MicroImages for specific interests.

TNTmips and TNTlite® TNTmips comes in two versions: the professional version and the free TNTlite version. MicroImages also offers TNTedit™, TNTview®, TNTserver™, and TNTatlas®. One TNT locale supports all TNT products.

Keith Ghormley, 7 June 2005

It may be difficult to identify the important points in some illustrations without a color copy of this booklet. You can print or read this booklet in color from MicroImages' web site. The web site is also your source for the newest tutorial booklets on other topics. You can download an installation guide, sample data, and the latest version of TNTlite:

http://www.microimages.com
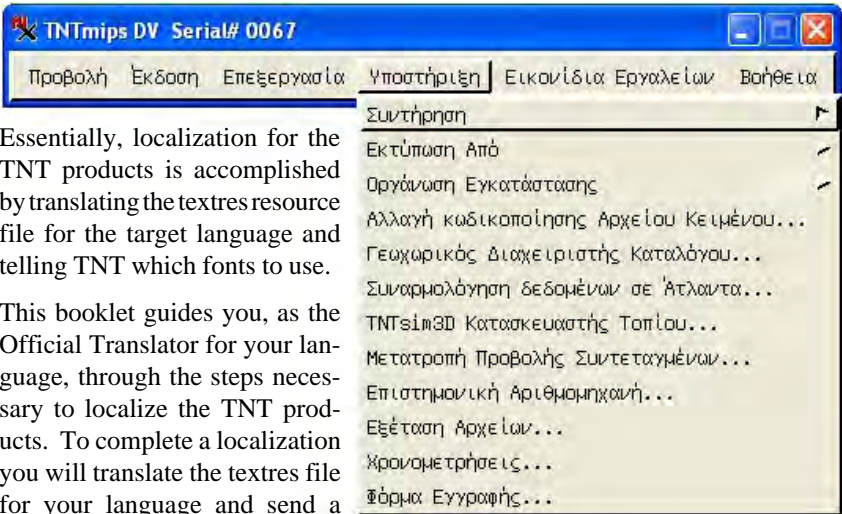
Localization

Essentially, localization for the TNT products is accomplished by translating the textres resource file for the target language and telling TNT which fonts to use.

This booklet guides you, as the Official Translator for your language, through the steps necessary to localize the TNT products. To complete a localization you will translate the textres file for your language and send a finished copy to MicroImages, Inc. so it can be included with the TNT products distribution.

From reports of those who have translated the TNT resource file, MicroImages estimates that an initial translation may require from 80 to 100 hours. Thereafter, updating the resource file for each new release may require from four to six hours.

Some classic issues of localization are not addressed in the TNT products. Automatic formatting for dates, time, currency and numeric values are not implemented since they have minor impact on production work in professional geospatial analysis.

PART 1 of this booklet (pp. 3-10) is for the **Official Translator** and describes how to create and maintain a locale.

PART 2 of this booklet (pp. 11-14) is for the **TNT products user** and describes how to select and use a locale.

IMPORTANT: This version of *Changing Languages (Localization)* is a complete replacement for the booklet of the same title that was used with the TNT Products V6.8 and earlier. The locale files and utilities for those earlier versions **do not work** with the TNT products beginning with V6.9.

Launch tntloc.exe

STEPS
- ☑ contact MicroImages, Inc. for the textres file for your language and your localizer password
- ☑ locate xs.exe in the TNT products directory and start it
- ☑ locate tntloc.exe in the TNT products directory and start it
- ☑ enter the 3-character locale code for your language
- ☑ enter your localizer password

As the Official Translator for your language, you will receive the textres file for your language from MicroImages, Inc. The textres file contains all the text resources for a complete localization of the TNT products. (In older versions of the TNT products, these text resources were distributed among several different files.)

Start xs.exe. The tntloc.exe utility runs only when the X server is already running. Then find the tntloc.exe utility in the TNT products directory and double-click its icon to launch the utility.
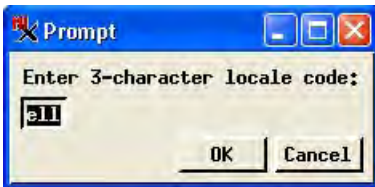
The first time you run tntloc.exe, you will encounter two dialogs that ask you for the locale code and password. The locale code is the 3-letter filename extension for your language, such as "ell" (Greek - textres.ell), or "deu" (German - textres.deu). Enter the locale code that appears as the filename extension of the textres file you received from MicroImages.

The Localizer password is also required. Enter the Localizer password you received from MicroImages.

The locale code and password dialogs appear only the first time you run tntloc.exe. In subsequent sessions when you launch tntloc.exe, you will go directly to the TNT Text Localization Utility window.

Note: In versions of the TNT products before V6.9, localization was done by editing the resource files directly, with any suitable text editor. But now all editing of the textres file is done with tntloc.exe.

TNT Text Localization Utility Window

The tntloc.exe utility opens the TNT Text Localization Utility window. All the text that you will translate is accessible from this window.

The scrolling list in the top panel shows three columns. The Name column contains the system keyword used by the software engineers in their program code. The English column contains the English display text to be translated. The Translation column contains the localized text for your language. All text that was translated in a previous version will already be included in the translation column. Scroll through the list in the top panel to find text that has not yet been translated.

The English panel in the middle of the window shows the English for the current selection. It is the same as the text in the English column in the top panel.

The Translation panel at the bottom of the window is the multi-lingual editing panel where you enter your translation text. Your text appears in the same font that is selected for TNTmips.

STEPS
- ☑ examine the components of the TNT Text Localization Utility Window
- ☑ select an item from the scrolling list in the top panel to observe how it appears in the English and Translation panels
- ☑ if your editing font appears incorrectly, use the Support / Setup / Fonts process in TNTmips to select the font you want

select text for translation from the scrolling list in the top panel

the original English text appears in the English panel

use the multilingual editing capabilities in the Translation panel to create your translation
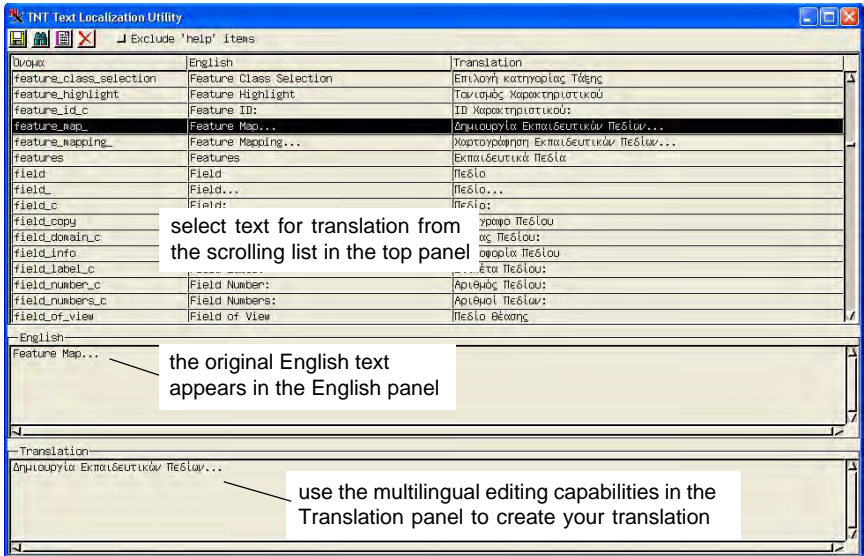
# Standardizing Translation Vocabulary

STEPS
- ☑ scroll through the list in the TNT Text Localization Utility Window to survey the range and focus of term usage
- ☑ create a list of terms for your reference

In technical disciplines such as those encompassed by the TNT products, rigorous and consistent vocabulary is essential. To avoid ambiguity, the first task of localization is to define precise vocabulary, and select consistent terms. Before you begin translating, scroll through the list in the TNT Text Localization Utility window, making a vocabulary list of key terms as you go.

As you look for equivalent terms, refer to the *Glossary for Geospatial Science* in the tutorial booklet series (**http://www.microimages.com/getstart/glossary.htm)** to see both the focus and the breadth of the English usage. Proper names (such as Delaunay) and acronyms (such as SPOT) need no translation. Some common English words are used with a particularized meaning in the TNT products,

Create a translation glossary that you can refer to as you translate.

so a careful choice of terminology in the target language is necessary. For example, "object" has a general currency in the computer industry that is broader than its particular meaning in TNT (where it always refers to a raster, vector, CAD, TIN, or database object in a Project File).
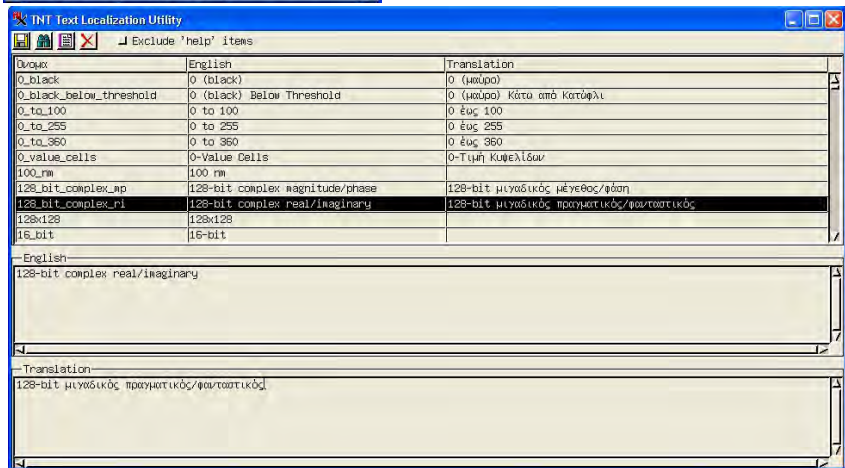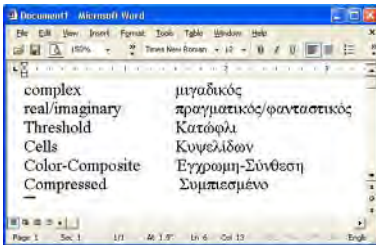
Interface Fonts and Font Support

Interface text appears in menus, tool tips, dialog boxes, and dialog boxes, and system messages. Select the fonts you need with the Support / Setup / Fonts process. In the Interface Font List Selection window, the available fonts are listed in the top panel. Scroll to each font that you want, select it, and click the Add button to add it to the Fonts To Use list at the bottom.

The TNT products can use TrueType, BDF and PCF fonts for interface text. However, the Interface Text Localization Utility requires a Windows computer, and you will make your translation using only the fonts that work on your Windows computer.

If you produce a locale that will be used on a UNIX computer, the operating system can use any fonts that work with the X Server as long as the fonts use the same encoding as the fonts you used in Windows to create the locale. UNIX users may need to look for BDF and PCF fonts on UNIX-related Web sites. The BDF and PCF fonts they select must be copied to the directory \tnt\bdf\misc to make them available to TNT.

Select the fonts you need in the top pane and add them to the active list by clicking the Add button.

If you select an existing locale, font selection is automatic, so you need not select fonts explicitly.

STEPS
☑ make sure the fonts you need for your translation are installed on your computer and selected in the TNT products

Recommendation: begin with the font **arial unicode ms**, which has a very large set of international characters. Switch to other fonts only after you have seen it work with arial unicode ms. NOTE: BDF fonts are usually not your best choice.

The Interface Font List Selection window shows the fonts available on your system.

Find and Replace, Variables Names

Use the multilingual text editor in the Translation panel to make your translation of the English text. Scroll to the next item that needs translation, select it in the top panel, and enter your text in the Translation panel.

Click the Find and Replace icon button to open the Find and Replace dialog.

Find and Replace Use the Find and Replace tool to replace all instances of a specified English word with the translated word you have chosen. Click the Find and Replace button to open the Find and Replace dialog. You can replace all instances of the English word, or replace instances one at a time (Find Next / Replace).

Variable Names Some interface text includes variable values. For example, in the Name / English pair

```
AtlasWizard_ErrFile File: '$1'
```

The $1 is a filename variable that is supplied with the appropriate filename when that message is retrieved. When you translate, change only the message text; do not change any variable names. All variable names have the $ prefix in the form $1, $2, $3, $4, and so on.

Note: Variable names are not the same as HTML markup codes. (See next page)

Leave variable names unchanged

Multi-line HTML

Some items include multi-line text. Basic formatting
is implemented with HTML tags. As you translate,
do not add, remove, or modify any HTML tags.

In the example illustrated,

```
Raster Boundary Conversion<br>
<p>
Convert groups of raster cells with the same value to vector or CAD polygons.  The boundaries
of the groups form the perimeters of the polygons.  This conversion process works best
with qualitative raster objects, such as the output objects from Theme Mapping or Automatic
Classification.
(See also <a HREF = "TNT:refman/Process.pdf#AutoBoundaries">Converting Qualitative
Raster Objects to Vector or CAD Objects</a>.)
```

- the <br> tag forces a new line
- the <p> tag inserts a blank line / paragraph
- the <a HREF...> tags define a hyperlink to a
  bookmarked spot in the reference manual.

HTML formatting is used for
Help and "Tip of the Day
items."

Other tags you encounter define tables and other
simple formatting for text that needs it.

You cannot add HTML tags indiscriminately, because
not every text widget enables HTML features.

Leave HTML tags
unchanged

Your Locale in the TNT Products

You can use the resource file that you have translated in the TNT products on your computer for testing. But note that a copy of the resource file must be sent to MicroImages to be incorporated into the TNT products for wider distribution. A copy of the resource file that you have prepared will not work with the TNT products on anyone else's computer. It must be processed by MicroImages first.

To select your locale, run the Support / Setup / Preferences process. Click the Language button in the Locale tab of the General System Preferences dialog, and select your locale from the scrolling list in the Language dialog.

Updating Locales. Each new version of the TNT products contains new features and new documentation. To maintain a localized TNT installation, you must update your locale file for each new release and send the updated copy of the textres file to MicroImages, Inc.


You locale will appear in the Locale tab in the General System Preferences dialog.
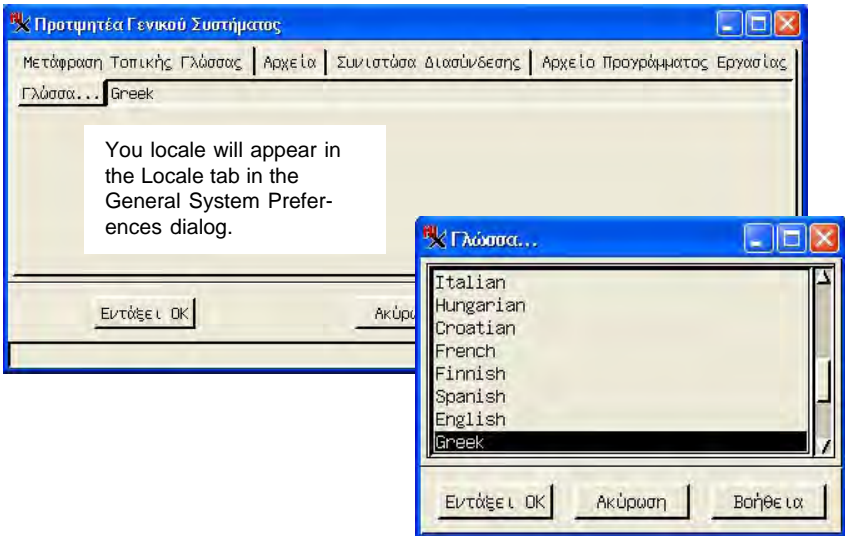
End of Part 1: For the Official Translator

Install the Language Support for Your OS

Before you attempt to use the locales in the TNT products, be sure to install the language support provided with your computer's operating system.

For Windows, select your language in the Regional and Language Options applet in the Control Panel. In Mac OS X, select the International applet in the System Preferences window.

Make sure you have a TrueType font that supports your language. The TNT products can use any TrueType font, but the most complete and reliable Unicode font is **Arial Unicode MS**, which is distributed with the Microsoft Office suite. If you have any font problems, switch to Arial Unicode MS.
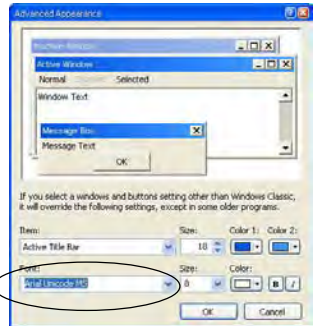
Make sure the Active Title Bar font supports your language.

Use Arial Unicode MS. The most complete and reliable TrueType Unicode font is distributed with the Microsoft Office suite.
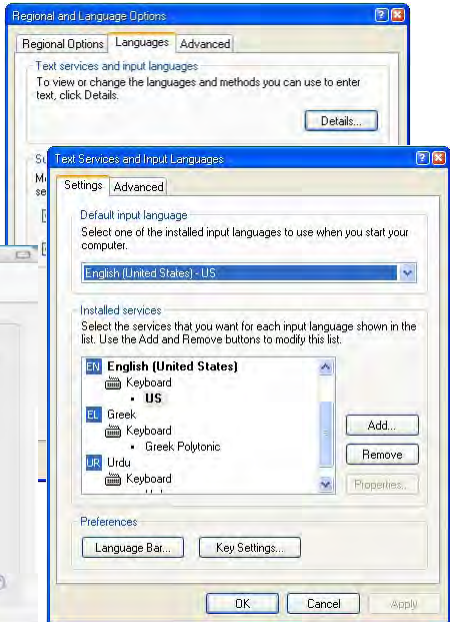
In Mac OS X, select your language in the International applet in the System Preferences window.

In Windows, select your language in the Regional and Language Options Control Panel

Select and Install a Locale

Use Arial Unicode MS. The most complete and reliable international font is distributed with the Microsoft Office suite.
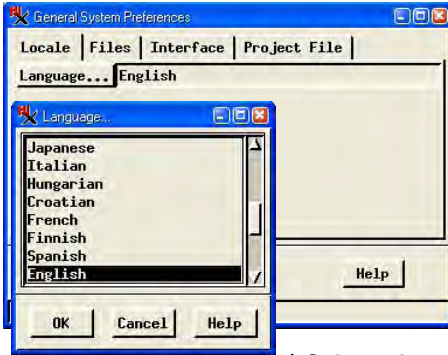
Select the locale you want from the Locale tab in the General System Preferences dialog.

The locales available for the TNT products are included with the TNT products distribution. You can also download new and updated locales from

http://www.microimages.com/i18n/locales/

The general sequence for installing a locale is

1) install the TNT products
2) install the locale
3) select your language font

Install the TNT Locale

Select Support / Setup / Preferences from the TNT menu. Select the Locale tab in the General System Preferences dialog. Click the [Language ...] button to open the Language dialog, which lists the TNT locales installed on your system. Scroll the list to the language you want and click [OK] to close the Language... dialog.

Select a Language Font

Select Support / Setup / Fonts... from the TNT menu. The Interface Font List Selection dialog shows the fonts that you have installed on your computer's

Add a font for your locale to the Fonts to Use list in the Interface Font Selection dialog.
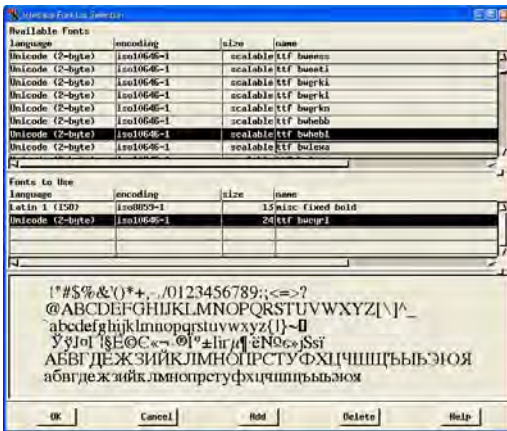
operating system. When you select a font from the list, a sample of the font shows in the sample pane. Click the [Add] button to add the selected font to the Fonts to Use list. The TNT products support any Unicode font.

The change of language will show after you exit the TNT products and start a new session.

Notes on Japanese with Mac OS X

To use the Japanese locale with Mac OS X, please follow these instructions.

1) Install the TNT products with the default (English) language interface.

2) Install the Canna support for the keyboard input method included on the TNT products CD, located in folder 2.

3) Start one of your installed TNT products (TNTmips, TNTedit, TNTview or TNTatlas)

4) Select Support / Setup / Preferences / Fonts from the main TNT menu. In the Interface Font List Selection dialog, select one of the fonts with JIS-0208 encoding. This is the font that will be displayed with your keyboard input.

5) Click [Add] in the Interface Font List Selection dialog to add the selected font to the Fonts to Use list.

6) Close the dialog and exit the TNT product. When you start the product again, TNT will use the newly selected font.

7) After restarting the TNT product, you use <shift-space> to activate the Japanese input method (J-IME). This will cause the text entry cursor to appear as a box. As you type, the characters will be displayed in Hiragana. After the whole word has been typed, press the <space bar> to display the word in Kanji. To accept the word as it has been entered, press <enter> or <return>. To display alternative forms of the word, press <space> again and select from the list presented the appropriate character.

To use the Japanese locale under Windows, follow the general instructions on the previous pages.

Japanese Input Method

canna.pkg

select alternative words from the list of suggestions
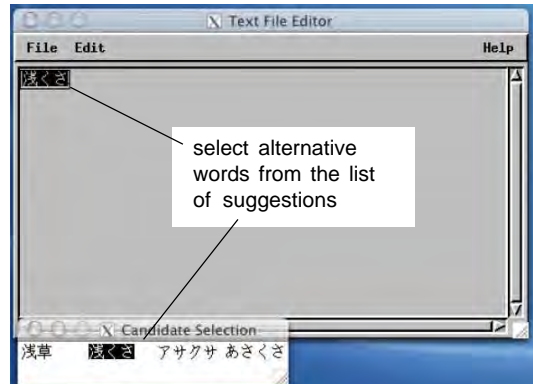
Notes on Arabic with Windows

Use the Arabic locale with Windows 2000 or Windows XP, which support Unicode. Do not try to use Arabic with Windows 98 or NT.

1) Install the TNT Arabic locale. (Refer to the page *Select and Install a Locale* earlier in this booklet.)

2) Select Support / Setup / Preferences / Fonts from the main TNT menu. In the Interface Font List Selection dialog, *remove* all the fonts in the Fonts To Use list, and *then* add either Arabic Transparent or Arial Unicode MS.

3) Close the dialog and exit the TNT product. When you start the product again, TNT will use the newly selected font.

DataTips, Layouts, and Databases

Choose a string encoding for your database fields to support the language you want in DataTips and layouts.

The TNT products support 2-byte text everywhere in the system for DataTips, map annotations, legends, and labels. No matter what language you use, you can create maps and displays that have any combination of international fonts and characters.
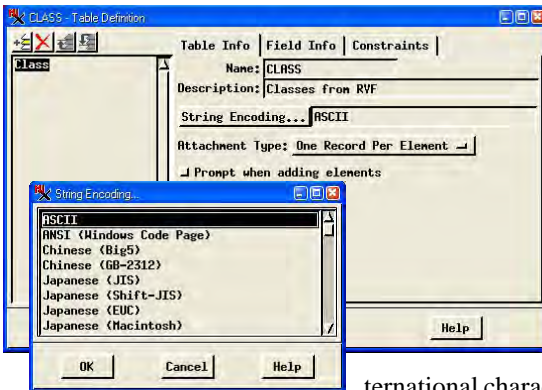
The text in your DataTips and map layouts is retrieved dynamically from the fields you select in the tables that are associated with the geospatial objects and elements. TNT displays the text just as it exists in the table.

Thus, in order to have your text appear with 2-byte international characters, you must define appropriate 2-byte text fields in your database tables.

Refer to the tutorials *Managing Geoattributes* and *Managing Relational Databases*.

Interface Packages on the Web

The MicroImages web site (www.microimages.com) provides a growing list of language interface packages. You can download and install the language package for any language. You may find it helpful to examine the translation choices that other translators have made, especially if you are preparing a translation in a cognate language.

New features and processes are added to the TNT products with each release. MicroImages bundles all the current locales with each new release. You can use an older locale, but if you do, then the interface elements for some new features, buttons, and messages will appear in English.

When the official translator finishes a translation, the new locale file must be sent to MicroImages for posting to the site and inclusion in the TNT products release. Official translator information is displayed on the download pages, so those who download your locale will see your contact information.

The locale packages for the TNT products V6.8 and earlier do not work with V6.9 and later. If you are using V6.8 and earlier, get the **zipped .pkg file** from the TNT products CD or download it from the MicroImages web site. If you are using V6.9 or later, the zipped file you download contains the **textres.xxx** file for your language, which you must copy to your TNT products directory.

Language Interface packages for a growing list of languages are maintained on the MicroImages Web site.

Available languages:	select your TNT products version:						Available languages:
Arabic		V6.6	V6.7		6.X*	V7.0	Arabic
Bengali						V7.0	Bengali
**Bosnian	V6.5	V6.6	V6.7	V6.8	6.X*	V7.0	Bosnian**
**Bulgarian	V6.5	V6.6			6.X*	7.X*	Bulgarian**
Chinese	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	Chinese
**Croatian	V6.5	V6.6	V6.7	V6.8	6.X*	V7.0	Croatian**
Dutch	V6.5		V6.7	V6.8	V6.9	7.X*	Dutch
Finnish	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	Finnish
French	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	French
German	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	German
Greek	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	Greek
Hungarian					6.X*	7.X*	Hungarian**
Indonesian					6.X*	7.X*	Indonesian**
...ian	V6.5						
...anese	V6.5						
Korean	V6.5						
...lish	V6.5						
...rtuguese	V6.5						
...manian	V6.5						
...ssian	V6.5						
Serbian	V6.5						
Slovakian	V6.5						
Spanish	V6.5						
Tagalog	V6.5						
Thai	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	Thai
Turkish	V6.5	V6.6	V6.7	V6.8	V6.9	V7.0	Turkish
Urdu				V6.8	V6.9	7.X*	Urdu

You can use older locales for your language if one for the current version has not yet been posted. However, you cannot cross the boundary between V6.8 and V6.9:
• Language packages for V6.8 and earlier will not work in V6.9.
• Language packages for V6.9 will not work in V6.8 and earlier

Advanced Software for Geospatial Analysis

MicroImages, Inc. publishes a complete line of professional software for advanced geospatial data visualization, analysis, and publishing. Contact us or visit our web site for detailed product information.

TNTmips   TNTmips is a professional system for fully integrated GIS, image analysis, CAD, TIN, desktop cartography, and geospatial database management.

TNTedit   TNTedit provides interactive tools to create, georeference, and edit vector, image, CAD, TIN, and relational database project materials in a wide variety of formats.

TNTview   TNTview has the same powerful display features as TNTmips and is perfect for those who do not need the technical processing and preparation features of TNTmips.

TNTatlas   TNTatlas lets you publish and distribute your spatial project materials on CD-ROM at low cost. TNTatlas CDs can be used on any popular computing platform.

TNTserver   TNTserver lets you publish TNTatlases on the Internet or on your intranet. Navigate through geodata atlases with your web browser and the TNTclient Java applet.

TNTlite   TNTlite is a free version of TNTmips for students and professionals with small projects. You can download TNTlite from MicroImages' web site, or you can order TNTlite on CD-ROM.

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