

Getting Started



Changing Languages (Localization)



in the

TNT Products

Before Getting Started

This booklet surveys the steps necessary to localize the TNT products. MicroImages 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 anyone anywhere in the world can create a localization. A localization can use any font, so that none of the original English words or Latin characters remain. Alternatively, you may choose a less ambitious level of localization and translate only selected interface elements, leaving the rest in English. Your localization efforts can put you into a unique leadership position in your country. Contact MicroImages for details of the official translator agreement.

Prerequisite Skills To implement a TNT Products localization, you must be a skilled computer user who is comfortable with both the English version of TNT and the target language for your locale. You should 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.

A Sample Locale A **Locale** is a set of files that contain all the information needed for a specific translation so that the TNT interface appears in another language. Several sample locales are provided on the current TNT products CD. The latest locale additions and revisions are posted on the MicroImages Web site. Contact MicroImages for specific interests.

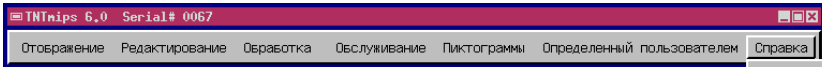
TNTmips and TNTlite® TNTmips comes in two versions: the professional version and the free TNTlite version. MicroImages also offers TNTedit™, TNTview®, TNTserver™, and TNTatlas®. One TNT locale supports all TNT products.

Keith Ghormley, 23 March 2001

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 Getting Started 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 a set of resource files into the target language and telling TNT what fonts to use. In the current version of the TNT products, the files that define the locale can be used to translate almost all of the interface elements in TNT.

This booklet guides you through the steps necessary to localize the TNT products. To complete a localization you will

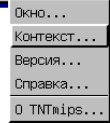
- translate the locale files,
- select interface fonts, and
- select annotation fonts.

Your computer, the TNT products, and your other applications use many different font and language resources. Font and encoding issues are foundational to localization efforts. The next few pages of this booklet summarize what you need to know.

From reports of those who have translated the TNT resource files MicroImages estimates that an initial translation may require from 80 to 100 hours. Thereafter, updating the resource files 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.

The examples in this booklet are illustrated for Windows 95/98/NT/2000. Localization for Macintosh and UNIX computers is also supported for the TNT products, and can be accomplished by using the analogous procedures on those platforms.



The illustrations on this page are from a localization in Russian created by MicroImages



MicroImages uses a TWM window manager for the TNT products that supports non-latin fonts in the TWM title bars.

The TNT Locale files described in this booklet:

messages.txt	page 9
tnxres.txt	10
errmsgs.txt	11
tnunits.txt	12
mapproj4.txt	13
smlfuncs.txt	14
smlclass.txt	15
reminder.txt	16
tnthelp.txt	17
resource.properties ...	19

Standardizing Translation Vocabulary

STEPS

- ☑ run SUPPORT / LOCALIZATION / GENERATE DICTIONARY...
- ☑ open GLOSSARY.TXT with EDIT / TEXT FILES
- ☑ in another window, open each locale file in turn
- ☑ search each locale file for the terms in GLOSSARY.TXT to survey the range and focus of term usage
- ☑ create a translated version of GLOSSARY.TXT 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 the locale files, settle on the terminology for your translation. Select SUPPORT / LOCALIZATION / GENERATE DICTIONARY from the TNTmips menu. Create an output text file named GLOSSARY.TXT.

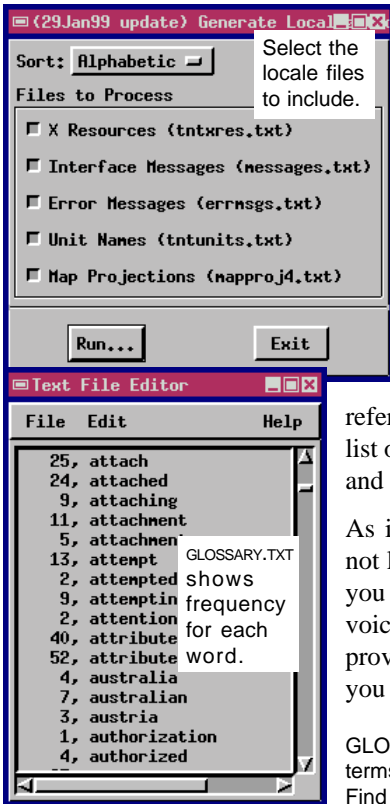
As you look for equivalent terms, refer to the glossary in the TNT reference manual to see both the focus and the breadth of the English usage. Proper

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, 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).

Create a translation glossary that you can refer to as you translate the locale files. Make a list of terms about which you are still uncertain and send them to MicroImages for help.

As important as a prepared vocabulary is, do not let uncertainty stop your progress. Even if you cannot determine the gender, case, tense, or voice to fit all a term’s contexts, proceed with a provisional translation and plan to refine it after you complete a “first draft” localization.

GLOSSARY.TXT contains a complete list of all terms in the locale files listed by frequency of use. Find consistent equivalents for English terms.



Font and Encoding Considerations

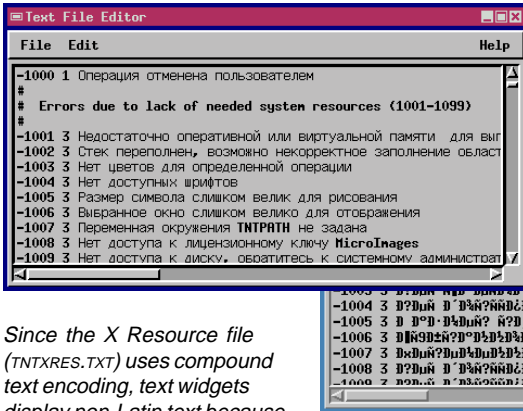
A **font** is a computer file that contains an ordered set of characters and symbols (**glyphs**), usually in a common typeface style, and usually containing an alphabet or character set for a particular purpose. In order to localize the TNT products, you need to have a font that contains the characters used by the target language, and you must specify the font's **encoding** (the order that the characters occupy in the file).

An **8-bit** character set can contain 256 characters, enough for the Latin alphabet (upper and lower case), punctuation, numerals, and special characters. Since many more than 256 characters are needed for international alphabets, **Unicode**, a **16-bit** super-set that contains all characters from all the world's alphabets has been defined.

The TNT products support both 8-bit fonts and Unicode. Subsequent exercises tell how to install fonts and how to manage different encodings.

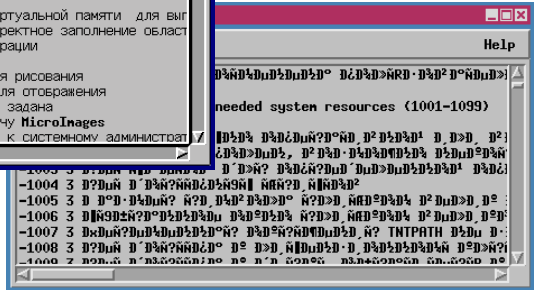
Many 8-bit character sets have been defined. Most contain the English (Latin) characters in the first 128 *code points*, and support for other characters (perhaps Russian, Greek, or Arabic) in the upper 128 code points. Since the upper 128 varies from set to set, you sometimes see nonsense characters when the computer does not have the correct 8-bit font and encoding selected.

Unicode has room for 65,000 characters and assigns code points for all the characters used in all the world's written languages. The TNT products use **UTF8** Unicode.



LEFT: This Russian file appears correctly if you select the 16-bit Unicode **UTF8** encoding.

Since the *X Resource file* (*TNTXRES.TXT*) uses compound text encoding, text widgets display non-Latin text because the encoding tells the system which font to look for. By contrast, all other locale files and interface elements (such as the *File / Object* directory) can display non-Latin text only if you have explicitly added the necessary font.



ABOVE: the same Russian file appears incorrectly unless you tell the editor not to use the default 8-bit **ASCII** encoding.

Interface Fonts and Font Support

STEPS

- select Support / Setup / Fonts from the main menu
- select the interface fonts you need in the top panel and click [Add]

BDF: Bitmapped Distribution Font. A type of interface font for the X Window System

PCF: Portable Compiled Font. Another type of interface font that is especially suited to Chinese and Japanese
BDF and PCF fonts are platform-independent. They can be copied between UNIX, Macintosh, and Windows computers and used without conversion.

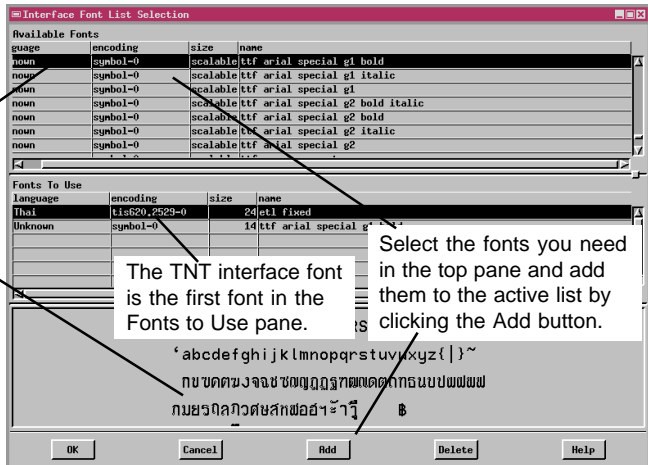
Interface text appears in menus, tool tips, dialog boxes, and system messages. Select the fonts you need with the Support / Setup / Fonts process. In the Interface Font List Selection window, the available fonts are listed in the top panel. Scroll to each font that you want, select it, and click the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

TNT can use TrueType, BDF and PCF fonts for interface text. If you use a UNIX computer, your operating system has a number of BDF fonts already installed, but your system configuration may not support TrueType fonts. For Windows and Macintosh computers, use any TrueType font or the BDF fonts that MicroImages distributes. Both BDF and PCF fonts have cross-platform formats; a font that you find on a UNIX computer can be copied to a Macintosh or Windows computer and used without conversion. You can find other BDF and PCF fonts on many UNIX-related Web sites. You can copy any number of custom BDF and PCF fonts to the directory \tnt\bdf\misc and make them available to TNT.

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

When a font is selected in the top pane, a sample of the characters it contains is displayed at the bottom of the window.

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



Editors and Editing

The next exercises present translation steps for the TNT locale files. Each locale file contains interface text along with index information that TNT uses to find its place in the file. To implement a localization, translate only the interface text. Never change the index keywords and control codes.

You can use the TNT text editor for all editing tasks, but you may prefer an editor that is specially suited to your target language. Your editor will open the simple ASCII text in the locale file and then use your computer's current system **code page** to record your edits. For example, if you open MESSAGES.TXT in a Russian editor under Windows 95/98, then the version of MESSAGES.TXT that you save will have the Windows Russian code page encoding. Any editor that does not use UTF8 encoding causes the TNT interface text to appear garbled.

In order to prepare a translated version of each locale file for TNT, you must convert the encoding to UTF8 Unicode with the Support / Localization / Change Text File Encoding process.

STEPS

- if you use an editor outside TNT, create a small sample text file to test its encoding
- open your sample text file in Edit / Text Files to see if the encoding is correct for non-Latin characters

Text editors that support Unicode are becoming more common. Check the latest version of your operating system to see if its editor supports Unicode.

Use the Control Panel's Keyboard applet to add keyboard support



Keyboard

for your language. Then switch between keyboard layouts with the popup menu in the Windows System Tray.

A file with the wrong encoding appears with nonsense characters in TNT.

Change Text File Encoding

File... | C:/TNT/win32/locale/rus/errmsgs.txt

Encoding... | Russian (CP866)

Preview

```
#
-1001 3 RkPuPPScfCP*CPScPSPS P
-1002 3 PUCPuPe PIPuCBPuPIPaPSP
-1003 3 RkPuC C+PIPuCPsPI PPU>
-1004 3 RkPuC PPSfCOFFIPSC9C...
-1005 3 P P*P*PJpuCB CFBPJPiPa
-1006 3 P CBR*CBP*PSPSPsPu PsPe
-1007 3 PuPuCBPuJPiPuPSPSP*CV PsPe
-1008 3 RkPuC PPSfCOFFIP* Pe P
-1009 3 RkPuC PPSfCOFFIP* Pe P
-1010 3 P&P*PecFBPJP*P&PSPS P
-1011 3 RkPuC PPSfCOFFIP* Pe C
-1012 3 P&PJPuCB*P&P&V P&P P
-1013 3 RkPuC CFSuPPSPSPSP&C
-1014 3 PUP&P&CP&P&PJ PJPSPSP
```

Encoding...

- ISO-2022
- X Resource File (TXTRES.TXT)
- Unicode (2-byte)
- Unicode (UTF8)**
- Korean (KSC-5601)
- Russian (CP855)
- Russian (CP866)
- Greek (CP869)

Specify UTF8 as the target encoding.

OK Cancel Help

Exit Help

Convert... Exit Help

Support / Localization / Change Text File Encoding converts the file to UTF8.

Create a New Locale

STEPS

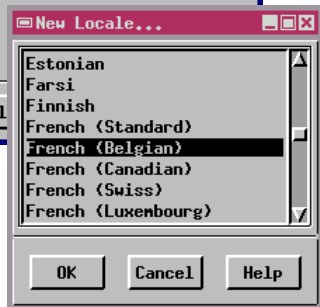
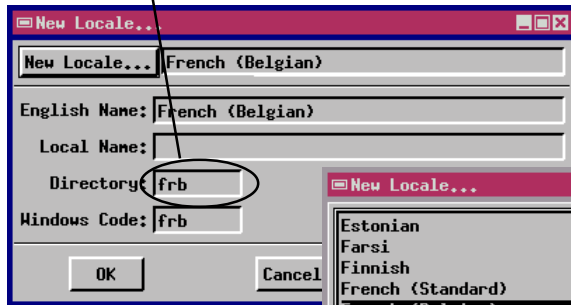
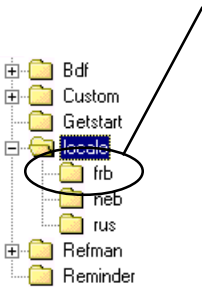
- ☑ select Support / Localization / Create or Update Locale
- ☑ click [Run...] in the Create or Update Locale Files dialog
- ☑ click [New Locale...] in the New Locale dialog
- ☑ pick French (Belgian) from the scrolling list
- ☑ click [OK] to close the scrolling list and New Locale dialogs
- ☑ click [Close] in the Locale Update Results dialog
- ☑ click [Exit] to finish the process in the Create or Update Locale Files dialog
- ☑ browse the contents of the new /LOCALE/FRB directory

After you tell TNT which fonts to use (see page 6), use the Create or Update Locale Files process to set up your initial locale files and directory. TNT keeps a subdirectory for each locale you create in its /locale directory. When you create a new locale, TNT creates a new locale subdirectory and puts a copy of each of the locale files into it. You will translate the interface text in each of the locale files, as shown in the following exercises.

For this exercise, create a Belgian French locale. Select Support / Localization / Create or Update Locale. Click the Locale button in the Create or Update Locale Files dialog and then choose New Locale and pick French (Belgian) from the scrolling list. Notice that the process shows frb as the directory name for the new locale files. Back in the Create or Update Locale Files dialog, click [Exit] to finish the process. Then go out to your computer's desktop and look in TNT's /locale directory to see the /frb subdirectory and new locale files.

The Create or Update Locale process creates a subdirectory in your TNT directory for each locale you create.

Click [Run...] in the Create or Update Locale Files dialog to open the New Locale dialog.



[New Locale...] in the New Locale window opens the New Locale scrolling list. Pick your locale, and click [OK] to close the scrolling list and the New Locale dialog. The process creates the locale directory and initial (untranslated) locale files.

Translating MESSAGES.TXT

Use your text editor or the TNT Text Editor (Edit / Text Files) to open the MESSAGES.TXT file in your locale subdirectory. For example, if you want to work with the French locale created in the exercise on page 8, open /LOCALE/FRB/MESSAGES.TXT in your TNT directory.

A unique TNT system keyword begins each line. After the keyword, the '=' character precedes the interface text, which takes the rest of the line.

Some interface text includes variable values and formatting codes, so that messages may include processing values and be displayed on more than one line. For example, when TNT uses the message

```
ConvertedFromCAD = Converted from CAD object '%S'
```

TNT substitutes the CAD object name for the variable placeholder '%S'. Therefore, do not change placeholders and formatting codes. The '\n' is used to start a new line for multi-line messages. All variable placeholders have a '%' prefix character (examples: %S, %d, and %.3f).

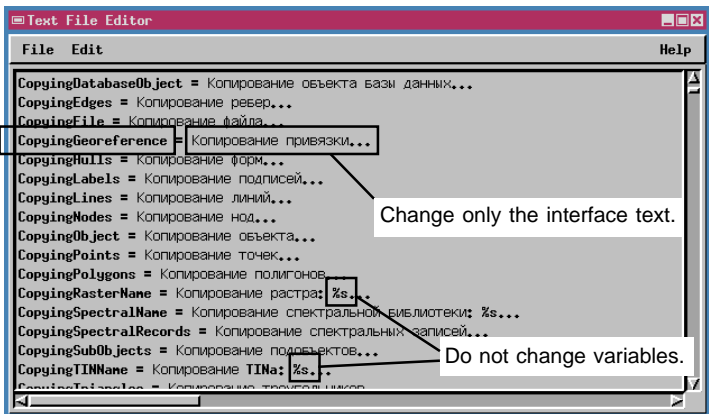
Save your changes to MESSAGES.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

STEPS

- ☑ open your locale's copy of MESSAGES.TXT with your editor or the TNT text editor
- ☑ translate all the message text (refer to your glossary of terms -- see page 4)
- ☑ save MESSAGES.TXT with UTF8 encoding

Variables in interface text begin with the '%' character and end with a letter, as in the examples %s, %d, and %.3f. When TNT uses the message, it automatically replaces the variable with the current value from the program context, such as file name, object name, or numeric value. Do not remove or alter variables in MESSAGES.TXT.

Never change system keywords.



Translating TNTXRES.TXT

STEPS

- open your locale's copy of TNTXRES.TXT with your editor or the TNT text editor
- translate all the message text (refer to your glossary of terms)
- convert TNTXRES.TXT to Resource File encoding

The **X Resource File encoding** lets one file use characters from many fonts. The system gets characters from multiple fonts as they are needed to display mixed text.

TNTXRES.TXT must use X Resource File encoding.

Use your text editor or the TNT Text Editor to open your locale's copy of TNTXRES.TXT. Comment lines begin with the '!' character. Skip the sections at the beginning of the file that have the headings

```
! Resource file for MicroImages TNT applications
! Example font settings
! General background color
! Dialog background colors
! "Accelerator" key definitions
```

Begin translating at the section headed

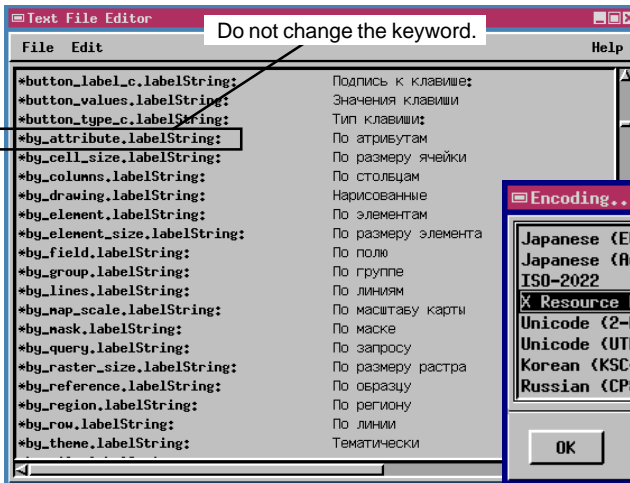
```
! Label strings used throughout TNT applications
```

A unique TNT system keyword begins each line. After the keyword, the ':' character precedes the label string text, which takes the rest of the line.

Save your changes to TNTXRES.TXT and convert the encoding to X Resource File encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

IMPORTANT: TNTXRES.TXT is the only TNT locale file that does not use UTF8 encoding. You must convert TNTXRES.TXT to X Resource File encoding.

Translate all the label text in the section headed " ! Label strings used throughout TNT applications."



When you use Change Text File Encoding, select **X Resource File (TNTXRES.TXT)** encoding (for TNTXRES.TXT only).



Translating ERRMSG.S.TXT

Use your text editor or the TNT Text Editor to open your locale's copy of ERRMSG.S.TXT. Comment lines begin with the '#' character. Each line begins with a unique TNT system error number and an error level value. Translate the error message text, which takes the rest of the line.

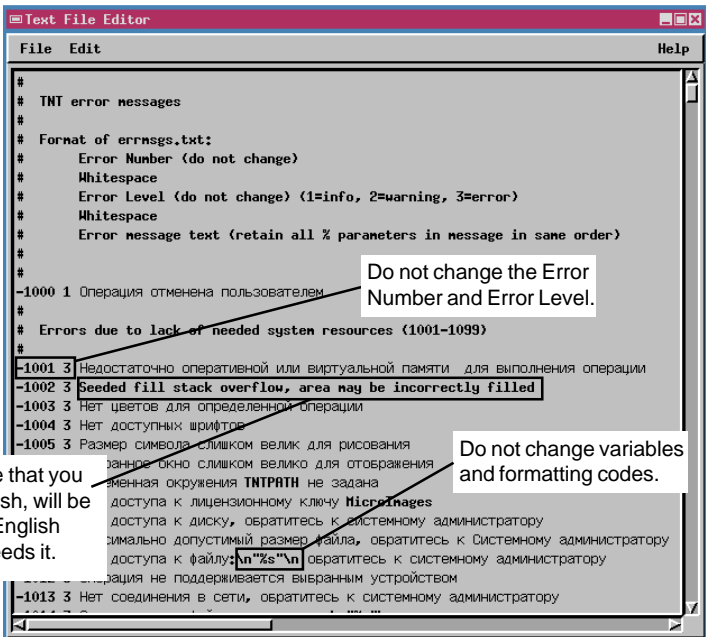
Some error messages include variable placeholders and formatting codes, which must not be changed. The '\n' is used to force a new line when a message is displayed. All variable placeholders have a '%' prefix character (examples: %S, %d, and %.3f).

As you translate, refer to your dictionary and glossary to make sure you use consistent terminology everywhere. (See page 4.) Save your changes to ERRMSG.S.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

STEPS

- open your locale's copy of ERRMSG.S.TXT with your editor or the TNT text editor
- translate all the message text (refer to your glossary of terms -- see page 4)
- save ERRMSG.S.TXT with UTF8 encoding

Variables in error messages begin with the '%' character and end with a letter, as in the examples %s, %d, and %.3f. Do not remove or alter variables or formatting characters ("\" in ERRMSG.S.TXT.



Any message that you leave in English, will be displayed in English when TNT needs it.

Translating TNTUNITS.TXT

STEPS

- open your locale's copy of TNTUNITS.TXT with your editor or the TNT text editor
- translate the units and abbreviations as needed
- Microlmages cautions you against adding any unit definitions required by your locale. (Request assistance from Microlmages.)
- save TNTUNITS.TXT with UTF8 encoding

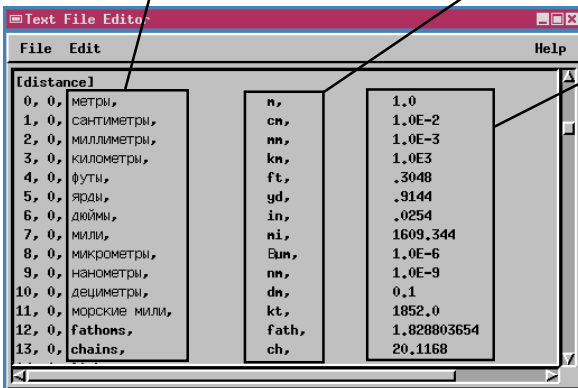
When TNT processes display the values of weights and measures, they use the measurement units defined in the file TNTUNITS.TXT. The unit names appear on selection menus and in reports. To localize unit names, use your text editor (if it supports UTF8 encoding), or the TNT Text Editor to edit your locale's copy of TNTUNITS.TXT. You can change the names of existing units and add definitions for new units.

On each line, translate the third field which contains the unit name as it will appear on menus and in some reports (wherever the unit is "spelled out"). You can also localize the abbreviation in the fourth field. You must use a UTF8 text editor to change the unit names if any non-ASCII characters are used. The name is limited to 31 characters.

Save your changes to TNTUNITS.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

The third field on each line contains the name that appears on TNT menus and in reports. Use an editor to localize the name and save TNTUNITS.TXT in UTF8 Unicode.

The fourth field on each line contains the abbreviated form of the unit name.



The fifth field on each line contains the unit conversion factor in terms of the base unit in the section. It is possible to add lines that define new units, but Microlmages strongly cautions against doing so. Microlmages will add new units for you upon request.

Translating MAPPROJ4.TXT

When TNT processes display map projection information, they use the projection, datum, and ellipsoid names defined in the file MAPPROJ4.TXT. The names appear on selection menus and information dialogs. To localize projection, datum, and ellipsoid names, use your text editor (if it supports UTF8 encoding), or the TNT Text Editor to edit your locale's copy of MAPPROJ4.TXT.

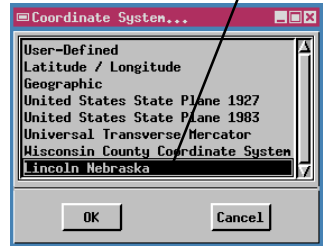
MAPPROJ4.TXT is divided into three sections. Comments in the file at the beginning of each section define the fields and contents of the records in that section. As illustrated below, the [mapproj] section can be edited only in the abbreviation and name fields. Do not add or remove any records. Likewise, the [datum] and [ellipsoid] sections have name fields that you may translate along with other fields that must not be modified. Refer to the comments at the head of each section.

You may also define a local map projection that is specific to your locale. Refer to the TNT reference manual for instructions on defining and naming a User Defined map projection.

STEPS

- open your locale's copy of MAPPROJ4.TXT with your editor or the TNT text editor
- translate the names and abbreviations as needed in the three sections [mapproj], [datum], and [ellipsoid]
- do not add or remove any lines from the file
- save MAPPROJ4.TXT with UTF8 encoding

You can create and name a User Defined map projection.

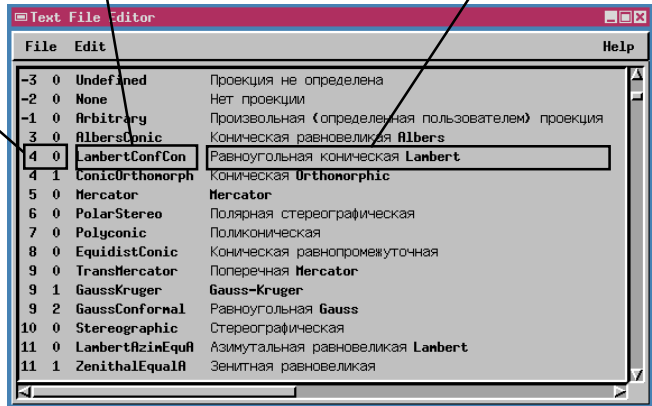


In the [proname] section, you may translate the third field, which contains an abbreviation.

In the [proname] section, translate the fourth field, which contains the Projection Name that TNT displays.

Do not modify the projection number and subtype codes in the first two columns.

MAPPROJ4.TXT has three sections you can translate [mapproj], [datum], and [ellipsoid].



Translating SMLFUNCS.TXT (optional)

Translating SMLFUNCS.TXT is an OPTIONAL step in preparing a localization.

STEPS

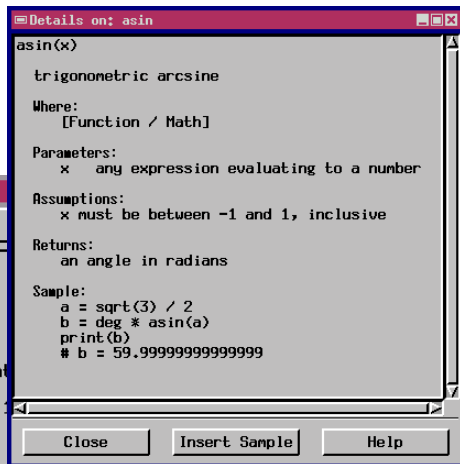
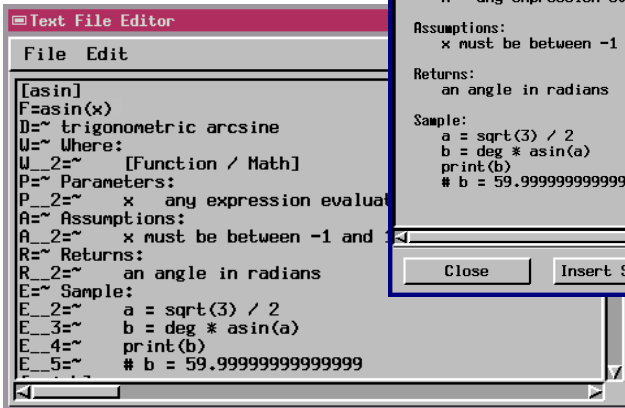
- open your locale's copy of SMLFUNCS.TXT with your editor or the TNT text editor
- translate the help definitions as needed
- save SMLFUNCS.TXT with UTF8 encoding

The SML process presents function definitions as aids to help users who are developing SML scripts. The function definitions are contained in SMLFUNCS.TXT. The function definitions also appear in support of GeoFormula layers, Cartoscripts, SML display layers, and spatial data queries in the display process. (GeoFormulas and queries use the same language and syntax as SML.)

Each SML function is defined by a group of lines headed by the function name in square brackets (for example [asin]). Each line in the section begins with a prefix character (F, W, P, A, R, or E) and some optional formatting codes. Do not modify the prefix and formatting codes. Translate just the help text in your locale's copy of SMLFUNCS.TXT.

Save your changes to SMLFUNCS.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

The SMLFUNCS.TXT file contains both help text and formatting codes. Compare the appearance of the file in the editor (below left) with its formatted appearance in the SML help window (right).



Translating SMLCLASS.TXT (optional)

The SML process presents class definitions as aids to help users who are developing SML scripts. The class definitions are contained in SMLCLASS.TXT. The class definitions also appear in support of GeoFormula layers, Cartoscripts, SML display layers, and spatial data queries in the display process. (GeoFormulas and queries use the same language and syntax as SML.)

Each SML class is defined by a group of lines headed by the class name in square brackets (for example [DBEDITORTABLE]). SMLCLASS.TXT contains just a short class description that appears in the definition pane of SML's Insert Class window. Translate just the short descriptions that follow the "=" character for each class in your locale's copy of SMLCLASS.TXT. (The Insert Class window often contains more information, such as member names, that cannot be translated.)

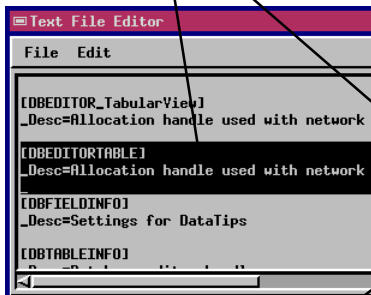
Save your changes to SMLCLASS.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

Translating SMLCLASS.TXT is an OPTIONAL step in preparing a localization.

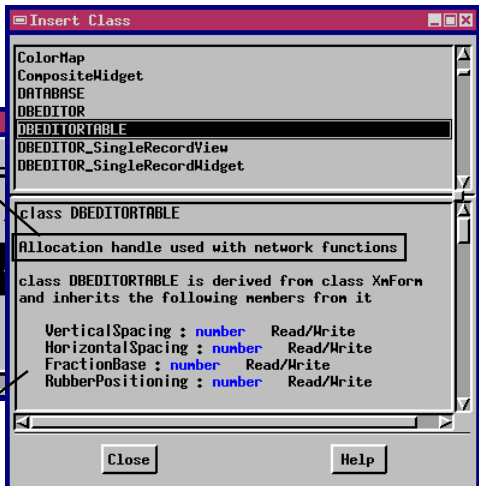
STEPS

- open your locale's copy of SMLCLASS.TXT with your editor or the TNT text editor
- translate the help definitions as needed
- save SMLCLASS.TXT with UTF8 encoding

The short description in SMLCLASS.TXT appears in the bottom pane of SML's Insert Class window.



Only the description can be localized; the class members cannot be changed.



Translating REMINDER.TXT (optional)

Translating REMINDER.TXT is an OPTIONAL step in preparing a localization.

STEPS

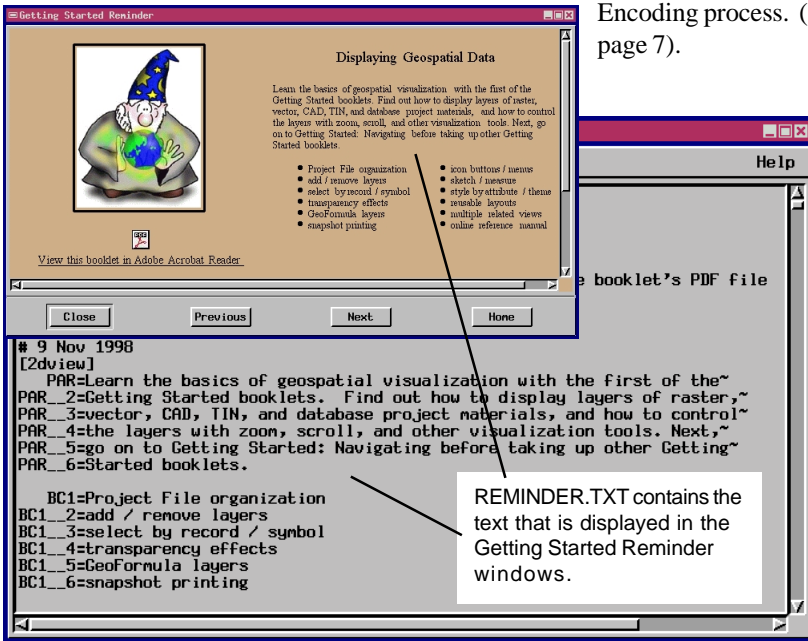
- ☑ open your locale's copy of REMINDER.TXT with your editor or the TNT text editor
- ☑ translate the descriptive paragraphs and feature bullets
- ☑ save REMINDER.TXT with UTF8 encoding

Both TNTlite and the TNT professional products display reminder screens that encourage the user to use the Getting Started booklets. The text for the Getting Started Reminder windows is in REMINDER.TXT. The TNT professional products display the reminder screens periodically: rarely enough not to be a bother, but frequently enough to keep the user aware of the Getting Started resources. The TNTlite product, which is provided for students and learning professionals, displays the Getting Started booklet index and reminder screens every time TNTlite starts.

Observe the control codes at the beginning of each line (in the form PAR__2=, PAR__3=, and BC1__2=). Do not change the control codes. Translate only the reminder text.

Save your changes to REMINDER.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File

Encoding process. (See page 7).



Translating TNTHELP.TXT (optional)

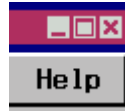
The TNT products have a quick help facility available in every window under the Help menu. Quick help is intended to provide short explanations of process options and functions. (Refer to the TNT reference manual for instructions on the features and use of the quick help system.) The text for quick help is in TNTHELP.TXT.

TNTHelp.TXT supports many HTML conventions, including text formatting and hyperlinks. Use the HTML `
` tag to force a new line. Use `<P>` for a blank line. Examine the illustration below to see how the hyperlink to the On Context portion of the help file is defined. Hyperlinks can also be defined to launch external programs, so you could define a hyperlink to open one of the Getting Started booklets in the Acrobat Reader.

Be sure to observe the section tags, which have the form `[help.on_help]`.

Save your changes to TNTHELP.TXT. If your editor does not use UTF8 encoding, convert the encoding with the Support / Localization / Change Text File Encoding process. (See page 7).

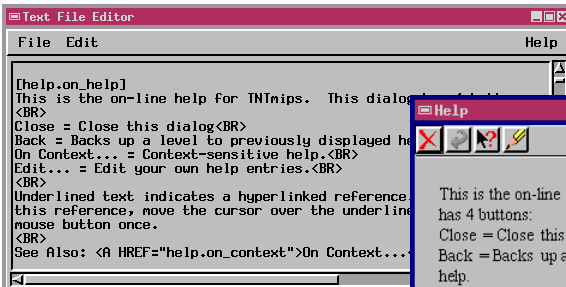
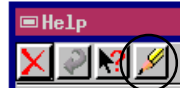
Translating TNTHELP.TXT is an OPTIONAL step in preparing a localization.



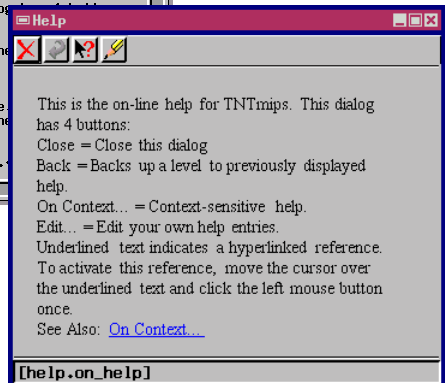
STEPS

- open your locale's copy of TNTHELP.TXT with your editor or the TNT text editor
- translate the help text
- save TNTHELP.TXT with UTF8 encoding

Users can add their own notes (which the system keeps in a supplemental TNTHELP.USR file) by clicking the edit icon button in a Help window.



Compare the TNTHELP.TXT file as it appears in the editor and in the Help window. Notice how the `
` tag forces a new line. Observe, too, how the On Context hyperlink in the Help window is defined in the TNTHELP.TXT file with a link tag that points to "help.on_context."



Reference Manual (optional)

Translating the Reference Manual is an *OPTIONAL* step in preparing a localization.

STEPS

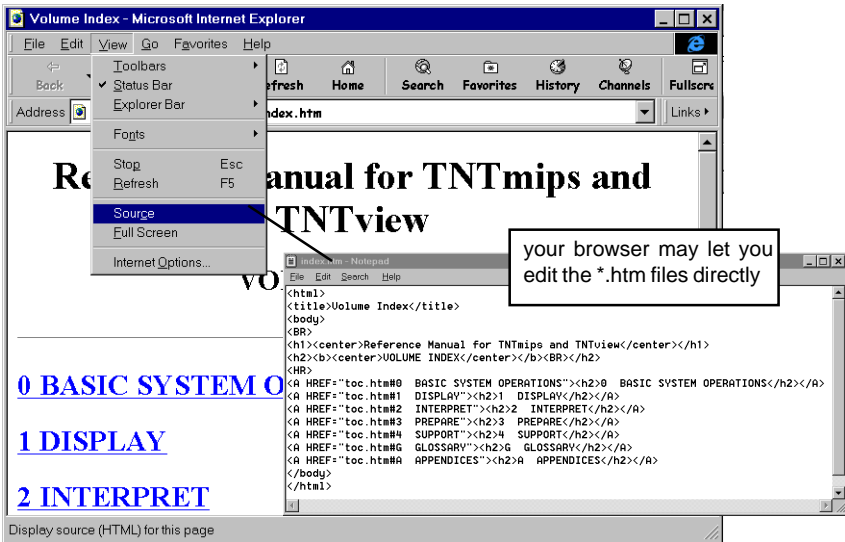
- make copies of the TNT reference manual HTML files for your locale
- translate each HTML file
- save the result with the encoding required by your browser
- run the TNT products and capture screen illustrations
- crop and edit your illustrations, saving each .GIF result in the /REFMAN / HTML / II and /CI directories

IMPORTANT: In order to preserve the hyperlinks between sections of the documentation, you must retain all HTML text and tags.

The TNT reference manual is distributed in HTML form. Obviously a translation of 3000 pages of process-by-process documentation and illustrations is a large task. You may decide to translate only certain sections for the processes that will be used more often.

The reference manual files are kept in /REFMAN / HTML / *.HTM. Set the Language Preferences in your browser so that when it loads a translated HTML file, the necessary font and language support is active. (Refer to your browser's documentation.) Do not translate the reference manual files in the Microsoft Word format provided by MicroImages since there is no easy way to preserve correct document and illustration links when you convert the translated Word files to HTML.

The on-line illustrations are kept in /REFMAN / HTML / CI / *.GIF and /REFMAN / HTML / II / *.GIF You can recreate these GIF files with screen capture and simple paint software, and copy your replacement illustrations to the correct directories.



Translating resource.properties (internet only)

The TNTserver product lets you publish TNTAtlas stacks on the internet for access from any browser. When a browser accesses a TNTserver site, it downloads TNTclient, a free Java applet that handles the special communication and display features required to navigate the atlas in the browser.

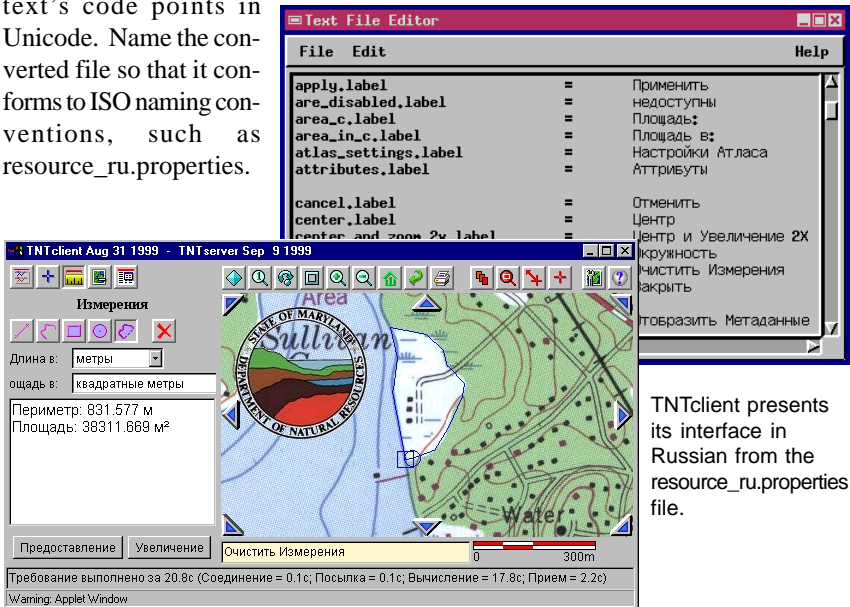
TNTclient can present its interface text in the default language of the browser and operating system. In order to localize TNTclient's interface text, translate its resource file: resource.properties. Make a copy of resource.properties and translate your copy (leave the original unchanged). As with other locale files, keywords are on the left, and translations are on the right.

When you finish, you must convert the translated file to a special ASCII format that the browser and Java client can use. Use the utility native2ascii.exe, which converts the UTF8 (or other) encoding of your translation into an ASCII file that contains the text's code points in Unicode. Name the converted file so that it conforms to ISO naming conventions, such as resource_ru.properties.

STEPS

- make a working copy of RESOURCE.PROPERTIES
- edit your copy of RESOURCE.PROPERTIES with your editor or the TNT text editor
- translate the interface text
- save RESOURCE.PROPERTIES with appropriate encoding
- convert the file to the special ASCII version needed by the browser with NATIVE2ASCII.EXE
- name the converted file in the form resource_ru.properties

Translate TNTclient's interface text in the resource.properties file.



TNTclient presents its interface in Russian from the resource_ru.properties file.

Packaging and Installing Locales

STEPS

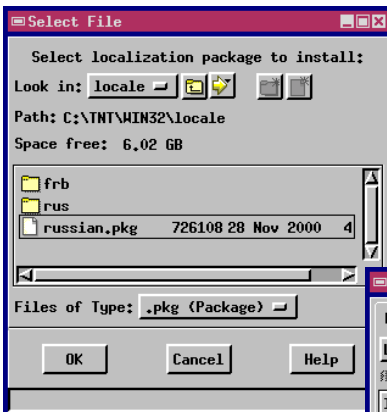
- get the RUSSIAN.PKG file and copy it to your /TNT/LOCALE directory
- run Support / Setup / Preferences
- click [Install Localization Package] in the Locale tab
- select /LOCALE/RUSSIAN.PKG and click [Okay]
- click the Language button in the Locale tab and select English (or else your TNT menus will appear in Russian in your next session)
- use your OS to examine the newly created /LOCALE/RUS directory

All of the files that make up a locale can be packaged in a single .PKG file for easy distribution. Using a single .PKG file guarantees that all the files for the locale are kept together and have the correct encoding. New locales are posted on the MicroImages Web site and can be downloaded in the .PKG format.

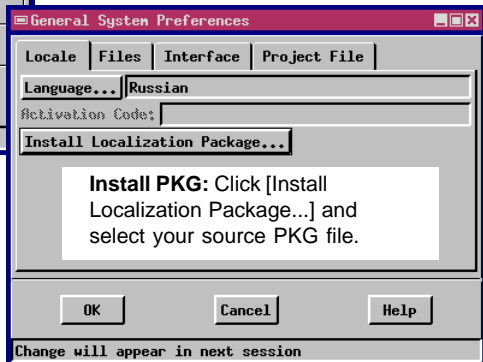
When you finish translating your resource files, send them to MicroImages for packaging. MicroImages will check the files for proper encoding and post your new .PKG file for distribution and installation. By your official translator's agreement, MicroImages retains the rights to your translation files so that responsibility for new versions might be passed on to another translator should you decide not to continue providing language support.

All language kits can be downloaded from the MicroImages Web site. Contact information for your business or organization appears on the download page every time someone chooses your language translation.

To install a locale from a .PKG file, run the Support / Setup / Preferences process and click the Install Localization Package button in the Locale tab.



When you install a .PKG file, TNT creates a subdirectory that contains the resource files for that locale. In the illustration above, there are locales for French (Belgian) "frb" and Russian "rus".

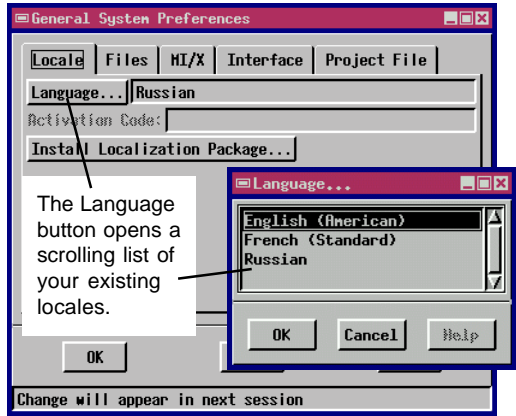


Switching and Updating Locales

The Support / Localization / Create or Update Locale process (see page 8) creates a /locale subdirectory for each locale you create. You can create multiple locales, each with its own locale files in its own subdirectory. To activate a locale, run the Support / Setup / Preferences process. Click the Language button in the Locale tab of the General System Preferences window, and select the locale you want from the scrolling list in the Language window.

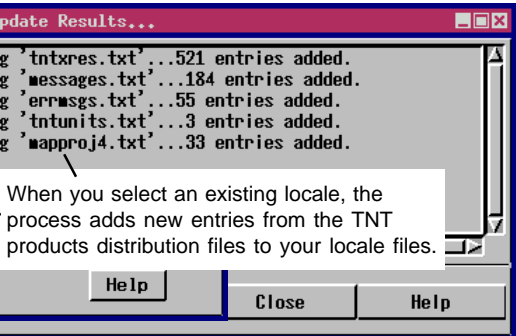
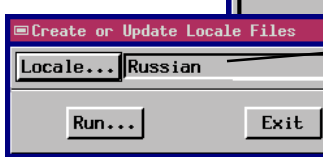
By preparing multiple sets of locale files, you can support several localizations on the same machine. If some of the users at a TNT installation work with one language, while others work in another language, you can switch between locales or even provide a mixed locale.

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 files for each new release. To identify those portions of the locale files that have been added or changed in a new release, run the Support / Localization / Create or Update Locale process (see page 8). Select your existing locale in the Create or Update Locale Files window. When you click [Run...], the process finds the new entries in each of the locale files in the TNT distribution, and copies them to your locale files. The Locale Update Results window shows the changes that have been made. Open each locale file and translate the new entries.



When you click [Run...], the process finds the new entries in each of the locale files in the TNT distribution, and copies them to your locale files. The Locale Update Results window shows the changes that have been made. Open each locale file and translate the new entries.

The experience of some who maintain current locales shows that it takes only about four hours to update the locale for a new release.



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.

The locale download page shows contact information for the official translator's business or organization.

New features and processes are added to the TNT products with each release. If you use an older language package with a newer release, then interface elements for some new

features, buttons, and messages will appear in English.

When you finish a translation of your own, send MicroImages your locale files for posting to the site. Those who download your locale will see contact information for your business or organization.

- Available languages:**
- Arabic
 - Bengali
 - Chinese
 - Dutch
 - Finnish
 - French
 - German
 - Greek
 - Hindi
 - Indonesian
 - Italian
 - Japanese
 - Korean
 - Polish
 - Portuguese
 - Romanian
 - Russian
 - Slovakian
 - Spanish
 - Thai
 - Turkish

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

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

Hindi					V6.30	
Indonesian			V6.10	V6.20	V6.30	V6.40
Italian					V6.30	
Japanese			V6.10		V6.30	
Korean				V6.30	V6.30	V6.40
Polish						
Portuguese						
Romanian				V6.20	V6.30	
Russian	V5.90	V6.00	V6.10	V6.20	V6.30	V6.40
Slovakian				V6.20	V6.30	V6.40
Spanish				V6.20	V6.30	V6.40
Thai				V6.20	V6.30	V6.40
Turkish		V6.00	V6.10	V6.20	V6.30	V6.40

Appendix: Japanese

A localization for Japanese has been prepared by the MicroImages Authorized Dealer in Tokyo. Contact him for information and support:

Toshihiko Waza	Phone: +81-3-3623-2851
OpenGIS Corp.	Fax: +81-3-3623-3025
KINOKUNIYA Bld. 7F,	E-mail:waza@kt.rim.or.jp
1-19-14 Azuma-bashi,	http://www.opengis.co.jp
Sumida-ku, Tokyo 130,	
JAPAN	

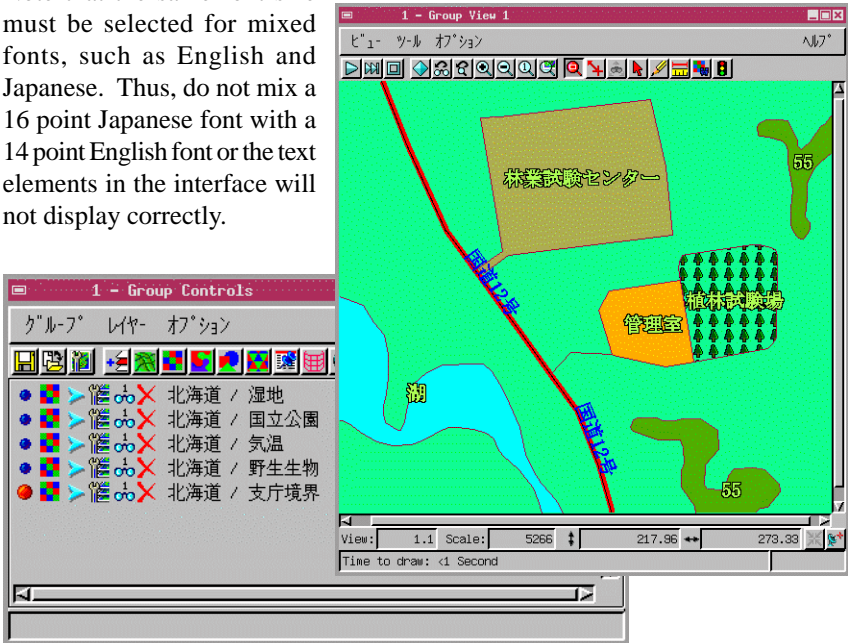
The preparation of the Japanese locale further illustrates the localization process. Two special interface fonts were selected in the “Fonts to Use” list (Refer to the exercise on page 6):

Japanese (Roman/Kana) jisx0201.1976-0
 Japanese (JIS) jisx0208.1983-0

It is also good practice to leave a Latin1 font in the Fonts to Use list.

Note that the same font size must be selected for mixed fonts, such as English and Japanese. Thus, do not mix a 16 point Japanese font with a 14 point English font or the text elements in the interface will not display correctly.

The Japanese localization available from OpenGIS Corporation and from the MicroImages web site. It provides a Japanese interface for menus, ToolTips, messages, dialogs, filenames, and of course, map annotations and labels.



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. TNTedit can access geospatial data in a wide variety of commercial and public formats.

TNTview TNTview has all the same powerful display features for complex visualization and interpretation of geospatial materials as TNTmips. TNTview is perfect for those who need flexible access to the TNT project materials but 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 contain multiple versions of the TNTatlas software so that a single CD can be used on any popular computing platform.

TNTserver TNTserver lets you publish TNTatlases on the Internet or on your intranet. Navigate through massive geodata atlases with your web browser by using the free, open-source TNTclient Java applet (or any custom applet you create) to communicate with TNTserver.

TNTlite TNTlite is a free version of TNTmips, TNTedit, and TNTview for students and professionals with small projects. You can download TNTlite for your computer (about 100MB) from MicroImages' web site, or you can order TNTlite on CD-ROM with the current set of *Getting Started* tutorial booklets (shipping and reproduction charges apply).



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