



## **BoTran2 Clarion Translation Templates**

Ver 1.1

Bo's Template Tamers

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## 1 Introduction To BoTran2

BoTran2 works with C4 - C7 Clarion(Legacy) and ABC template chains. Supports Multi-Dll apps.

I was asked to create a Translation Template that was easy to add, use, get up and running, where you do not have to hack the shipping templates, and be reasonably priced. (Whew!) BoTran2 is the result of that request. I added the "Dynamic" feature to BoTran2, because I like "Dynamic", and do not think you should have to restart the app to switch languages<g>. This endeavor was not possible without the interaction of a very good group of Beta Testers, as I am seriously linguistically impaired to English.

Tired of fighting with all the TRN files, ENV files, and different versions to offer several language translations with your app?

Tired of fighting with 3rd Party products that can be difficult and confusing to use?

Relief is here with BoTran2 Translation Manager.

BoTran2 uses its own classes derived from the Translator Class and Error Class provided with Clarion.

BoTran2 does not require any changes to the Base Class Types provided with Clarion.

BoTran2 is added as "Translator" in the Legacy(Clarion) chain.

BoTran2 is Easy to implement and get up and running. It comes with JumpStart utility to load default text into your Language file for the app, and a BTL file editor ([EdBoTranM](#)) to add translated phrases. EdBoTranM can add any translations you have done for other apps in [Copy Trans](#) , so you do not need to duplicate your efforts, and yet still keep your files lean, mean, and fast.

It automatically picks up any items not included in the file at runtime the first time you run a procedure in a language other than "default". You need to uncheck the 'Do not Update the BoTran2 File' in the global to do this. Remember to check it again when you are done. Go thru the app, opening each procedure, to add any text that is new or missed in the JumpStart utility. This won't be much<g>. Picking a language not being used is the safest<g> so you don't accidentally add strings that are already translated to your language file.

Everything is stored in one file (BTL) for easy maintainability. Prompts, menu items, browse headers and group headers, formatting pictures, key in pictures, Locale info, etc. One additional file (BTS) is used for establishing a default language if your default language is NOT English. If your default language is not English, you have to fill out the TRN files once, shipped with BoTran2. This is only necessary to establish your default language with BoTran2, which defaults to English.

You can offer 28 Languages with just one tps(BTL) file. Your default language plus 27 additional languages. Add additional BTL files for additional languages as needed. Each additional file adds 27 more languages capabilities. You then need to modify the language change procedure to pass the correct BTL file to the Translator if more than one is used.

Dynamic Language switching is possible using the BoTran2Lang selector control.

BoTran2 can use a "global queue" or "direct file" access for translating resource hungry apps.

Hopefully Generous developers will send their Language files(BTL) and ENV files(BTS) to me, so I can post Master Language files on the website to make everyone's life easier when Translating apps.

## 1.1 Overview

BoTran2 works with C4 - C7 Clarion and ABC template chains. Supports Multi-Dll apps.

The following statement does not cover any 3rdParty templates or add on's unless they are mentioned as being supported specifically in the [Compatibility](#) Section. If they support Translator in ABC, then they have a better chance of working with BoTran2.

You do not need Multiple TRN or ENV files to ship with your basic app and dll's. BoTran2's Language file (BTL) and Substitution file (BTS) are all that is needed to translate the app into multiple Languages.

**Basic How it works:** BoTran2 takes the "Default text" , or date format, or picture, for a control, ToolTip, Message, Browse Header, "whatever" and looks it up in a queue or file in the "default language" portion. If a translation exists in the "chosen language", BoTran2 replaces the default string with the replacement string. If BoTran2 does not find the "default text" in the queue or file, BoTran2 will add it to the File and the queue(If you select this option). This is why you should not "Translate" already "Translated" text, as it will start adding them all to the BTL file as Default Text strings.

BoTran2 always does a **Upper(Clip(Left('MyText')))** so it ignores extra blank spaces for lookups.

BoTran2 will include extra spaces in the "Translated" text if you use them for spacing.

BoTran2 is **not Case sensitive**, so File = file = fiLe = fiLE, etc.

**But** &File <> File <> File: <> Fi&le -- each is a separate entry in "default text"

The BoTran2 TranslatorClass operates on all user interface elements including window controls, window title bars, tooltips, list box headers,list box group headers, and static report controls. Menu's, Toolbar's, etc. Browse cell and date formats, etc.

Elements must have a Use Variable (?MyUseVar) for BoTran2 to translate them. (Watch your reports, the generator likes to leave them out.)

BoTran2 will (Late) translate "Action Messages" on Forms if you use them, check the box on the template.

BoTran2 comes with a Translatable Print Preview to substitute for the default one in the Legacy Clarion Template Chain.

BoTran2 comes with the following hooks to translate captions, messages, etc.

```
{PROP:Libhook, 1} PROP:ColorDialogHook  
{PROP:Libhook, 2} PROP:FileDialogHook  
{PROP:Libhook, 3} PROP:FontDialogHook  
{PROP:Libhook, 4} PROP:PrinterDialogHook  
{PROP:Libhook, 5} PROP:HaltHook  
{PROP:Libhook, 6} PROP:MessageHook  
{PROP:Libhook, 7} PROP:StopHook
```

BoTran2 works with Capesoft(tm) MessageBox.

It puts the BoTran2 Hook "after" the MessageBox hook, and sends the Translated Message to MessageBox.

When used with BoTran2, don't use the MessageBox Language change utilities for the buttons.

BoTran2 will take care of that with the Locale Settings.

BoTran2 will also translate the MessageBox window.

## 1.2 Other Uses

Besides Translating Languages, BoTran2 will easily change prompts for different versions of the same program.

This allows you to use the same app for multiple purposes, and the Language Control will select the group of prompts to use and change them on forms, windows, and browses, etc. It handles currencies, picture formats, etc.

Any inventory or data storage program you want to be specific to a group of purchasers in a vertical market.

## 1.3 Getting Started

### How to get started quickly.

**NOTE:** All Radio's need to have a "Value" parameter set on them to use in your code, because BoTran2 will translate the text on the Radio control and it will no longer be available for use in your code. Drops, Combo's, and Spins that use "From" text lists must also have a "Value" stored to use in your existing code. The controls also need a "use" variable on them to be translated as in the Spin example below that uses a local variable for storage.

```
RADIO('Pie'),AT(0,12),USE(?RType:Radio2),VALUE('Pie')
```

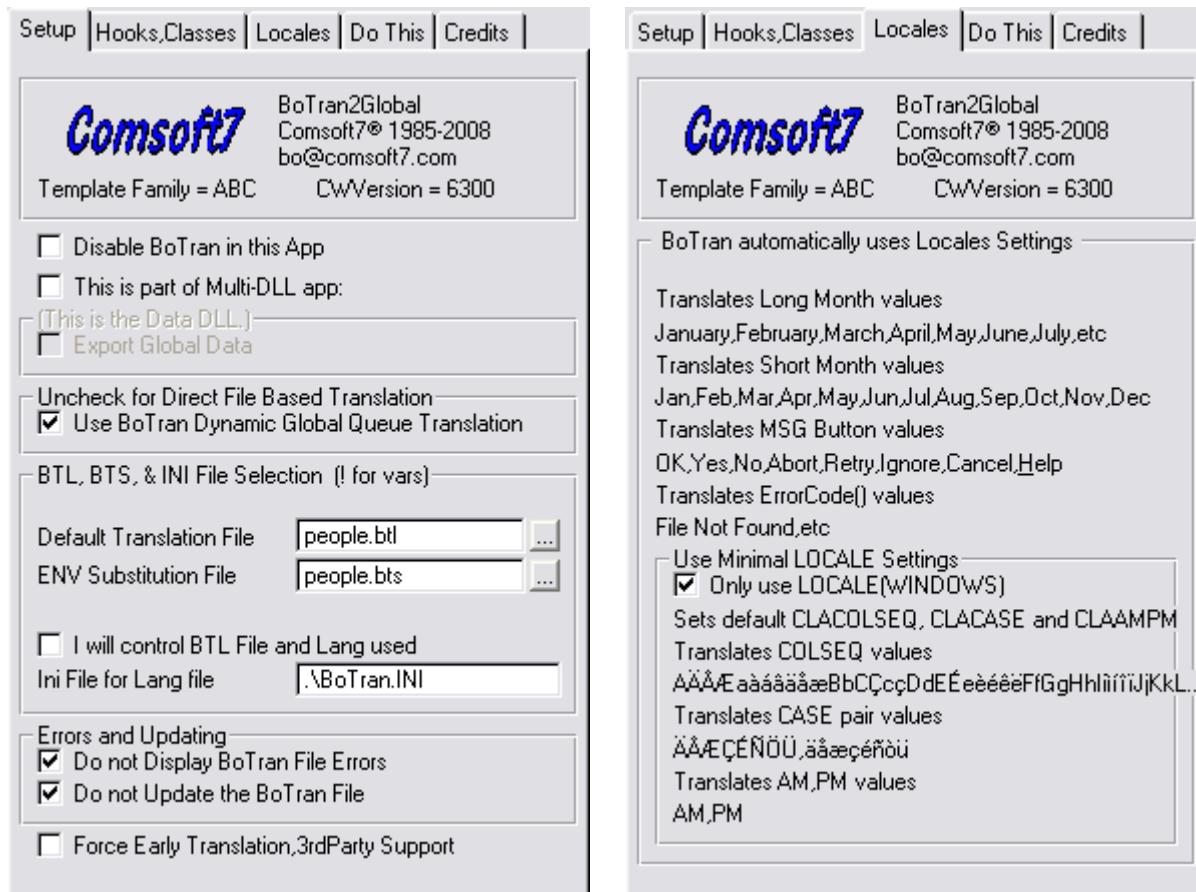
```
SPIN(@S4),AT(280,0,20,20),USE(SpinVar3,,?SpinVar3),FROM
('Mr.|#1|Mrs.|#2|Ms.|#3|Dr.|#4')
LIST,AT(300,0,20,20),USE(?L16),FROM
('Apples|#Apples|Peaches|#Peaches|Pumpkin|#Pumpkin|Pie|#Pie')
```

Check your [Redirection](#) file for proper setup.

1. Run the BoTran2 **Export Default Text JumpStart Utility** on your app to create the Translation file. BoTran2 will create a default %Application.btl file(\*.BTL) that holds the default prompts and pictures from your app. If it is a multi-dll app, run the utility on each app to pick up any addition prompts from the other apps. Use the same BTL file for each app in a multi-dll environment. BoTran2 will create the file in the root directory. BoTran2 will also create the default %Application.bts file(\*.BTS) in the root directory. This is used if your default Language is not "English" and for Changing some Environment Variables.
2. Use the included Utility program **EdBoTranM.exe** to type in your Translations and Manage the translation file. The file is not case sensitive, so File, file, and file are all the same. However &File, File, and File: are not. They each need a separate translation. BoTran2 only translates default strings that have an entry in the "chosen" language, if no entry is present, it will skip that translation and use the default value. EdBoTranM has features to transfer existing translations from other BTL files, or PD string files into your new Language file to save work. (**Hint:** Use this to create Master file for translations.)
3. Any prompts missed by the JumpStart utility will be automatically entered into the BTL file the first time the procedure is entered when in a "Language" other than default(1). The JumpStart utility is pretty thorough, and catches most of them. Run it again after making any app changes, as it will add any new strings, and not overwrite existing ones. It will however update any changes made to your BoTran2 TRN files.
5. Add the **BoTran2Global** Template and fill in the prompts. This automatically adds all the procedure templates. You can disable the templates with a switch in the Global template, and each procedure can be individually overridden and disabled as needs arise. Use the same template settings in each Global template in a multi-dll environment, but make sure you have the "Data export" checkbox and "This is part of a multi-dll" check boxes set correctly. See [ABC](#) and [Clarion](#) for the differences in the setup on the Global templates.
6. Add a Menu item or toolbar button for a procedure using the **BoTran2Lang selector** control template. It is a control template that drops on a "generic window" and selects the active Language, stores it in the ini file, and dynamically switches the app to the new language. It updates the main Frame menu at the same time you select a new Language. This needs to be on the same thread as the Main Frame to work correctly. (Clarion requirement, not mine<g>)
7. The **BoTran2Ext** procedure template Has a switch on it for "disabling in this procedure", a switch that is enabled for a form for late translation of the window caption if you are using "Action Messages", and a switch to use a translated "Preview Window" for reports. These are only effective in "Legacy". ABC has its own calls to the translator class derived from BoTran2.
8. The **BoTran2Special** "Code" template is for special case translations. It can translate the entire window, the window caption, one control, or a range of controls. This is used if

you change a control conditionally in code, and need to translate it again after you change it. Use this code template if the window has already been translated by BoTran2. The range of controls is for when you dynamically create several controls, or have 3rd Party templates that dynamically create controls, to allow late translation.

### 1.3.1 ABC



See [BoTran2Global](#) for more information on these prompts. The main thing if you are using ABC is to Enable Run-Time Translation.

Individual File Overrides | Global Objects | Classes

Clarion Version

General | App Settings | File Control

Program Author: Bo Schmitz

Default Icon: [ ] ...

Use column description as MSG() when MSG() is blank

Generate template globals and ABC's as EXTERNAL

External Globals and ABC's Source Module

Dynamic Link Library (DLL)

Statically Linked Library (LIB)

Generate EMBED Comments

Non Volatile Storage Settings

Location: INI File

INI File Options

INI File to use: Program Name.INI

Use app directory

Disable Save/Restore Window Locations

Preserve

Enable Run-Time Translation <<<<<<

Enable Fuzzy Matching

Fuzzy Matching Options

Ignore Case

Word Only

Make sure you have enabled the Run-Time Translation with the checkbox.

### 1.3.2 Clarion Legacy



See [BoTran2Global](#) for more information on these prompts.

In Legacy the main thing to be concerned with is if you need to Translate the Default Print Preview.

### 1.3.3 Multi-DLL

From the example shipped with BoTran2, DLL Tutor from examples shipped with C6.2

**Note:** In the ABC multi-dll example, I had to add the **ABC Free template** to exclude classes from compiling to stop some **other 3rdParty dll's and ABC classes** from compiling in to get the app to compile. Basically you need to be able to compile your dll's and exe cleanly before you add BoTran2, as it will not (did not) cause this problem. See the appropriate documentation for the 3rdParty add-on causing the compile errors.

Root or Data Dll

Remember to Check all the boxes for all the apps to **Enable Run-Time Translation**.

The image displays two screenshots of the BoTran2 configuration interface, specifically the 'File Control' settings.

**Left Screenshot: 'File Control' - General Tab**

- Program Author: Bo Schmitz
- Default Icon: [Empty field]
- Use column description as MSG() when MSG() is blank
- Generate template globals and ABC's as EXTERNAL
- External Globals and ABC's Source Module:
  - Dynamic Link Library (DLL)
  - Statically Linked Library (LIB)
- Generate EMBED Comments
- Non Volatile Storage Settings:
  - Location: INI File
  - INI File Options:
    - INI File to use: Program Name.INI
    - Use app directory
  - Disable Save/Restore Window Locations
  - Preserve
- Enable Run-Time Translation <<<<<
- Enable Fuzzy Matching
- Fuzzy Matching Options:
  - Ignore Case
  - Word Only

**Right Screenshot: 'File Control' - File Control Flags Tab**

- Generate all file declarations
- When done with a File: Close the File
- Enclose RI code in transaction frame
- Issue template warning if LOGOUT() not allowed
- Seconds for RECOVER: 10
- File Attributes:
  - Ithreaded: Use File Setting
  - Create: Use File Setting
  - External: None External
- Export Files:
  - Export all file declarations
- Enable Triggers Support
- File Access:
  - File Open Mode: Share
  - Other Open Mode:
    - User Access: Read/Write
    - Other Access: Deny None

Use the standard settings for your file controls.

Setup | Hooks,Classes | Locales | Do This | Credits

**Comsoft7** BoTran2Global  
Comsoft7® 1985-2008  
bo@comsoft7.com

Template Family = CLARION      CwVersion = 6300

Disable BoTran in this App

This is part of Multi-DLL app:  
(This is the Data DLL.)

Export Global Data

Uncheck for Direct File Based Translation  
 Use BoTran Dynamic Global Queue Translation

BTL, BTS, & INI File Selection (! for vars)

Default Translation File    rootdll.btl    ...

ENV Substitution File      rootdll.bts    ...

I will control BTL File and Lang used

Ini File for Lang file      .\BoTran.INI

Errors and Updating

Do not Display BoTran File Errors

Do not Update the BoTran File

Force Early Translation,3rdParty Support

^^

You need to check the box for **Multi-DLL**, and **Export Global Data** in this root or data dll. All the rest of the dll's you will have just the Multi-DLL box checked.

Aim all your dll's at the same Default Translation(\*.BTL) and ENV(\*.BTS) file for BoTran2. I recommend using the Main dll name for this, as these fields default to the app Name. If you load the Main dll, and run the BoTran2 JumpStart Utility, it will create these files for you, and you can easily load them with the ellipse button in each dll.

Remember to run the JumpStart utility on each app, aiming it at the same BTL file so all text is added to the same Translation file for all the apps. You can run the JumpStart utility again after changes to the app to add any new strings, etc to the Language file or pickup changes to your ENV TRN files. Running the utility again will add any new strings to the BTL file, and update the BTS file to any changes. It will not change any existing entries in the Language file.



On the hooks, classes tab, Check the Hooks you want to use.

In ABC, Check the boxes to use BoTran2 for the Translator, and If you want to Translate global errors.

Legacy Does not have this option, but has a checkbox to Translate the Default Clarion Print Preview Screen. This option will substitute a BoTran2 Print Preview Screen that can be translated.

## 1.4 Default Language

If your **default Language** is **English**, **do nothing** here.

If You want the default Language to be **Not English**, you need to fill out the [BoTran2 TRN Files](#).

You may need to alter [ReadTrn2.exe](#)

ReadTrn2.exe is a utility provided with BoTran2 templates to read the temp files created by the JumpStart Utility and create the BTL Language translation files and BTS substitution ENV files used by BoTran2. Most of the default text is gathered from the app, and passed into the BTL file so you can start editing right away.

ReadTrn2.exe has an embed in it, where you may have to set your ClaCase to properly "Upper" the text strings in your app for non case sensitive Translation. This is necessary if your default language has special characters in it that need to be made case insensitive with the "Upper" function.

This code is in that embed that ships with BoTran2.

```
#AT(%WindowManagerMethodCodeSection,'Init','()',BYTE'),PRIORITY(7800)
```

```
LOCALE('WINDOWS')           !Set default CLACOLSEQ, CLACASE and CLAAMPM !  
6/11/05
```

ReadTrn.exe is placed in the %ROOT%\bin directory.

Source app and dct for ReadTrn2.exe is placed in %ROOT%\3rdParty\examples\Comsoft7\BoTran2\Source directory.

## 1.5 License Agreement

License & Copyright Notice

### BoTran2 Translation Manager

BoTran2 Translation Manager is copyright 2008 by Comsoft7. None of the files included in this package may be distributed individually or in an altered state without first contacting the author.

BoTran2 is provided without warrantee or guarantee, implied or otherwise. Use at your own risk. Using BoTran2 implies acceptance of this agreement, along with recognition of copyright. Comsoft7 cannot be held liable for any damages or business losses, which may occur as a direct or indirect result of using BoTran2.

```
#! BoTran2 Translation Manager is the intellectual property of Bo Schmitz -  
#! AKA Comsoft7 Copyright 1985-2008  
#!  
#! The author has developed all template code independently,  
#!  
#! Licensing is based on SoftVelocity's - one developer can run  
#! BoTran2 on more than one machine as long as they are the  
#! main user and it is the same copy of Clarion. The developer can  
#! run BoTran2 on more than 1 version of Clarion as long as  
#! they are upgrades. Therefore, one license required per each  
#! Softvelocity license. You can transfer the license to another  
#! developer by first consulting the author.  
#! Inquire the author for site license's or multiple licenses.
```

```
#!  
#! Because BoTran2 is all code, please observe the copyright.  
#! I made the decision to not Black Box BoTran2, and you may  
#! modify it to suit your purposes. Please advise the Author of  
#! any major changes, your needs, and perhaps these changes or needs  
#! can be included as features.  
#!  
#! BoTran2 must not be copied, or modified, in part or whole  
#! (except for Personal use), or distributed to another person in  
#! any way, without first Contacting the author.  
#!  
#! The author may be contacted by email at Bo@comsoft7.com  
#!  
#! No warranty of any kind! Use at your own risk.  
#!
```

## 1.6 Compatibility

All names are trademarks of respective companies.

Following have tested compatible with BoTran2 or have support "built-in" BoTran2.

Capesoft MessageBox  
CPCS Reports  
FrameText from SolidSoftware  
Clarionet

## 1.7 Whats New

### BoTran2 Ver 1.1

Sept 9, 2009 Added dummy file BoTranS.\$\$\$ to avoid ReadTrn2 errors when using ExportEmbedText.

May 15, 2009 added #Utility([ExportEmbedText](#) ,'BoTran2 "JumpStart" Export Embed text V1.1'),WIZARD

Caveats:

Wizard does not ignore commented out ones

Cannot detect multi-line messages, tips, etc.

Wizard will catch the first line of them.

They must be properly formatted to find them." message(' " - no extra spaces.

#PDEFINE('\_BOTRAN2\_',1) and compile directives in classes.

April 24, 2009 added hidden prompt %DisBoTran to get of random errors.

### BoTran2 Ver 1.0

October 12, 2008. Added BoTran2 support for Long application names containing spaces.

September 26, 2008 EdBoTranM - Added export columns to CSV, and import CSV using basic driver.

September 18, 2008 :Added new Flag and control template to create report in another

Language than one being used by app. Add it with the pause control on a report Window. Can save selection. BoTran2ReportLang --- 'BoTran2 Select Report Language Control V1.0'

New global prompt 'Only use LOCALE(WINDOWS)' to !Set default CLACOLSEQ, CLACASE and CLAAMP skip those Locales in procedures to use windows defaults on destination machine.

Added Global Switch : Force Early Translation,3rdParty Support -- to force Early Translation of windows for 3rdParty Support.

There are individual procedure switches for Force Early Translation in the procedure Extension, if you only have problems in one procedure etc.

Added Support for up to 28 languages per Language file.

Now stores the first instance of where the source(to translate) came from in the Language file.

Changed Method for loading queue and UPPER to avoid most CLACASE problems.

### **BoTran2 is built on all these changes in BoTran(1)**

Sept 13, 2008 (2.53)

change force translation to get first priority after opening window(8000)

New Flag- RptDifLang BYTE !Use a different language on report

Sept 8, 2008

#PROMPT('Check this if having Botran Lookup problems',CHECK),%UseDefault,AT(10)

New Flag- UseDefault BYTE !Upper the default string to avoid ClaCase problems.

Does an upper left clip on default string to avoid mismatch at runtime.

Add backup btl file to rid unused text strings in btl file.

#PROMPT ('Create New file,gets rid of unused records',CHECK),%BoBackFile,AT(110)

Load btl file in use default prompt to have bak file not placed by redirection file.

It will place it in same directory as btl file then.

Sept 7, 2008

#PROMPT('Force Early Translation,3rdParty Support',CHECK),%ForceABCEarlyWinTranslation,AT(10)

**Ver 2.51** Sept 3, 2008 Minor release. Updated EdBoTran for using Text field prompts to accommodate multi-line tool tips. Update all help files for [Multi-Line Tool Tips](#).

**Ver 2.5** Aug 27, 2008 Support added for Hebrew and Arabic, bug fixes, misc enhancements.

added code to method to right justify text fields if converted from entry and prop:layout is used. (C6)

Added method BoTran.RevFormat to reformat List and combo boxes to right justify, and mirror image of order the fields are displayed.(C4-C55x) flag = ReverseFormat

Entry to text not working right, bugfix.

Prop:single in C4 on

Prop:layout in C6 on

[BoTranAB.TRN](#) changed. Added 2 more Flags.

! 1 = Reposition Entry and Prompt, right justify entry New \*\*\*\* August 2008

LOCALE('\_ENV:ReposEntryPrompt'),DEFAULT('\_ENV:ReposEntryPrompt'),REPLACE('0')  
! 1 = Reverse List box formats, and change to right justify default. New \*\*\*\* August 2008  
LOCALE('\_ENV:ReverseListFormat'),DEFAULT('\_ENV:ReverseListFormat'),REPLACE('0')  
Language change was adding call to change frame twice.  
Bug in free queue for language selection.  
Added method BoTran.Reposition to reposition prompts  
and entry controls for Arabic,Hebrew type languages.  
Feb 19, 2008  
added checkbox for 'Export Only Minimal Window Text',%BoWinText  
Nov 21, 2007  
moved legacy hook prototypes to force in column 5  
Aug 4,2007  
added '%TransFile' = %(%StripPling(%TransFile)) for allowing variables.  
added '%BTSubFile' = %(%StripPling(%BTSubFile)) for allowing variables.  
May 28,2007  
added '%BSIniFile' = %(%StripPling(%BSIniFile)) for allowing variables, ini relocations.

#### **BoTran Ver 2.4** Mar 23, 2007

added direct picture assignment for entry controls.  
added switch to procedure extension, Prompt : 'Have BoTran Force pictures to entry flds'  
Nov 6,2006  
added support for C6 List header sort and LM stuff.  
Try omitting Error queue declaration line 152 in BoTranx.inc.  
Changes to frame code and error class

#### **BoTran Ver 2.3** Jan 16, 2006

Changed to work with Frameless apps.  
FontDialog GPF  
added ,<?\* P:CodePage>  
added IF P:Title = " THEN P:Title = 'Select Font'

#### **BoTran Ver 2.2** June 22, 2005

Bugfix Changed code in template for DLL mode ABC.  
Changed "Dynamic Language Change" to a Function to reduce code generated in Dll's.  
BugFix "Special code translate" template when used with one control.  
Added the following to ReadTRN after procedure init to properly UPPER strings in  
Translation file.  
LOCALE('WINDOWS')  
LOCALE('CLACASE','ÆØÅ,æøå')

#### **BoTran Ver 2.1** May 19, 2005

BoTran now follows ABC checkbox for 'Enable Run-Time Translation'  
Disabled %ControlFieldDefaultTip in versions less than C5508

### **BoTran Ver 2.0** March 12, 2005

**Note:** == and change If you have earlier version installed.

You no longer have to select the BoTran classes for Translator and ErrorClass under Global Objects. Check the box to use the Default ErrorClass and Translator Class in the IDE . BoTran will automatically substitute its classes for you when you check the boxes in the BoTran Global Template.

Derived GlobalErrors for BoTranErrC Class, and solved the problems so Global Errors are now dynamic. C4-C6 ABC (Legacy uses different Methods.)

Added support to translate CPCS ABC reports.

EdBoTran.exe

Added "RevMrg Trans" Button that will let you merge files with a different default language into your Language file. You can map the default Language column from the source file into a translated column in the destination file. You can map a translated column as the default Language column in the source file.

### **Version 1.91** March 5, 2005

All changes this time should be transparent to Developer.

Templates updated to use Locales properly to Translate Error Codes.

Couple Class changes for this.

Wrapped %ControlFieldDefaultTip in check so it doesn't cause errors in versions prior to C55. (In JumpStart Utility)

Updated to use AddError for C6, AddErrors for older versions. Also RemoveErrors.

**Note:** Language Change Procedure must be on same thread as Main Frame. (System Requirement, not mine<g>)

ReadTrn.exe will now "update" BTSUB if BoTran(TRN) files have changed.

EdBoTran.exe now has "EIP" and "Form" based updates to keep everybody Happy.

You can now edit the BTSUB file(BTS)

**Note:** Manual insert into the Language(BTL) file must go thru "Form" to update properly. It automatically creates the UPPER Default Text needed for the lookups.

**Note:** Remember there is a checkbox on the global template to let BoTran add new text found as you run it. Checkbox = 'Do not Update the BoTran File' Uncheck this box and run the app in a Language other than default, and it will add new text as it finds it. Run a Language that you have no translations for, to be safe. Sometimes it will add already translated text otherwise.

Remember to Check the box again before you ship your app.

**Version 1.9** February 23, 2005

Paradigm changed. Class rewritten  
Changed handling of Global Errors to accommodate changes in C6.  
No longer substitute a class for Global Errors.

**Version 1.8** October 8,2004

Split off Legacy class.  
Added Error Class.  
Locale automated. Sept 22,2004  
Added Entry to text runtime field format.(Automatic) Sept 20,2004.  
Changed BoTran File format to include a clipped Upper Left default to load directly into queue.  
Added BTSUB file for when Default Language is "NOT ENGLISH".  
Added BoTran TRN files and BTS file for establishing default Language.  
Changed over to deriving the Translator class.  
Changed field length to 512 for longer tips and messages.  
Added Copy translations, mapping, etc to EdBoTran utility program.  
BTConvert exe added for current users.  
Changed file format to make loading faster Sept 15,2004.

## Previous

Added BTMan.BTButtons Sept 5,2004  
Locale added. Sept 4, 2004  
CPCS support added.  
MessageBox support added.  
Hooks added. Sept 3, 2004  
Dynamic Frame added.  
Translated Print Preview added.  
Bugs squashed as they were found.  
Languages raised from 5 to 10.  
Derived Queue class added.  
Classes rewritten several times.  
Tons of features added and tested following month.<g>  
Primitive BoTran Placed in Beta Aug 8, 2004.

**1.8 Update From BoTran(1)**

There will be a small amount of work to converting your app over to BoTran2.  
If you want to run both, see [Run BoTran and Botran2](#).

If English is not your default language, [see below](#). You will need to edit or delete the BoTranAB.TRN file. Back them up before uninstalling BoTran.

If English is your default language, can delete BoTranAB.TRN so the new one will be installed. It is located in the %Root%\3rdParty\Libsrc directory.

**1. Uninstall BoTran.**

2. Install BoTran2.
3. Modify BoTranAB.TRN if you did not delete it.
4. Convert your existing BTL Language file with provided Utility [ConvBTL.exe](#).
5. Loading your app now will strip the Old BoTran files out.
6. Reinstall the BoTran2 Global tpl, and change the Language control in your app.
7. Replace any other BoTran templates that you have had in use in the app.
8. Run the jumpstart utility to add new flags from BoTranAB.TRN to language file.

**If your default language is not English:** Backup your BoTran TRN files located in the %Root%\3rdParty\Libsrc directory.

[BoTranAB.TRN](#)

[BoTranCL.TRN](#)

[BoTranRP.TRN](#)

**BoTran2 install will not overwrite your existing \*.TRN files located in your %Root%\3rdParty\Libsrc directory**

This is intentional so it will not overwrite any changes you have made for your default language.

**BoTranAB.TRN changed. Added 2 more Flags.**

**You will need to manually update BoTranAB.TRN** by adding the Following texts at Line 13.

**! 1 = Reposition Entry and Prompt, right justify entry New \*\*\*\* August 2008**

**LOCALE('\_ENV:ReposEntryPrompt'),DEFAULT('\_ENV:ReposEntryPrompt'),REPLACE('0')**

**! 1 = Reverse List box formats, and change to right justify default. New \*\*\*\* August 2008**

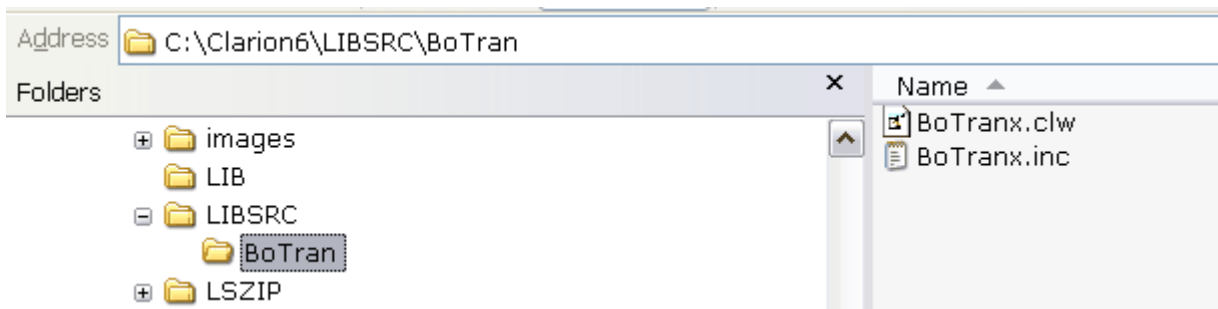
**LOCALE('\_ENV:ReverseListFormat'),DEFAULT('\_ENV:ReverseListFormat'),REPLACE('0')**

You want it to look like the file shown in the help here. [BoTranAB.TRN](#)

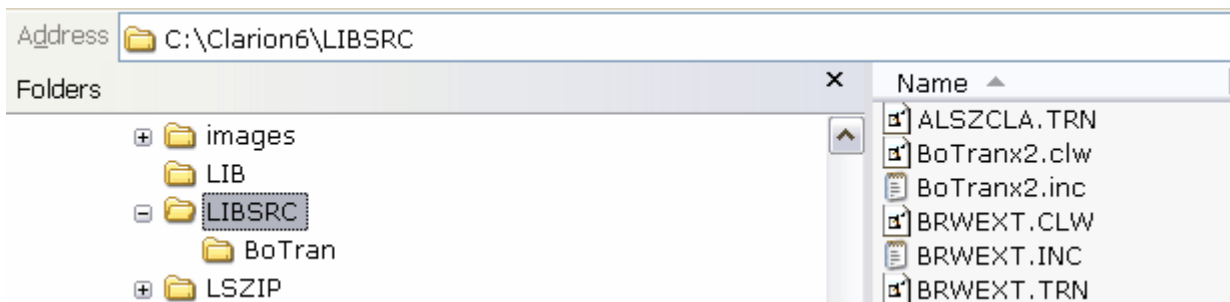
Running [jumpstart](#) again will add the new flags to your language files so they are ready to use.

## 1.9 Run BoTran and BoTran2

If you want to be able to use BoTran and BoTran2 to maintain apps, do not uninstall BoTran. Create a new directory under your main LIBSRC directory called BoTran. Move the 2 BoTran class files into the new directory as shown below.



Then only the 2 new BoTran2 classes will remain in the LIBSRC directory.



**Alternate the classes you want to use into the LIBSRC directory as you use BoTran or BoTran2 respectively.** The reason for this is that the Language File declaration is different for the 2 different versions of BoTran(2). The legacy versions of the classes are in 3rdParty Libsrc directory, and do not have this clashing problem.

**If your default language is not English: Backup your BoTran TRN files.**

[BoTranAB.TRN](#)

[BoTranCL.TRN](#)

[BoTranRP.TRN](#)

**BoTran2 install will not overwrite your existing \*.TRN files located in your %Root%\3rdParty\Libsrc directory**

This is intentional so it will not overwrite any changes you have made for your default language.

**BoTranAB.TRN changed. Added 2 more Flags.**

**You will need to manually update BoTranAB.TRN** by adding the Following texts at Line 13.

**! 1 = Reposition Entry and Prompt, right justify entry New \*\*\*\* August 2008**

**LOCALE('\_ENV:ReposEntryPrompt'),DEFAULT('\_ENV:ReposEntryPrompt'),REPLACE('0')**

**! 1 = Reverse List box formats, and change to right justify default. New \*\*\*\* August 2008**

**LOCALE('\_ENV:ReverseListFormat'),DEFAULT('\_ENV:ReverseListFormat'),REPLACE('0')**

You want it to look like the file shown in the help here. [BoTranAB.TRN](#)

Running [jumpstart](#) again will add the new flags to your language files so they are ready to

use.

## 1.10 Legacy to ABC Migration



If you migrate an app from Legacy to ABC, and leave the BoTran2 templates in it, it may "Remember" the Clarion template family in the BoTran2 templates, and in that case, go to the Credits tab, and click on the **Reset Template Chain** button to correctly detect the current Template chain in use for the app.

Do this in the Global Template.

## 1.11 Under the Hood

BoTran2 uses a **Global Variable** to Dynamically switch Languages at runtime.

```
G:BTLang        BYTE(1)
```

BoTran2 uses a TPS (extension BTL) **file** for Language translation.

```
BoTranF
FILE,DRIVER('TOPSPEED'),NAME(BoTranFilename),PRE(BOT),CREATE,BINDABLE
Key_DefLang    KEY(BOT:DefLang),NOCASE,PRIMARY
Record        RECORD,PRE()
DefLang        STRING(512)
SrcOfText     CSTRING(512)
Lang2         CSTRING(512)
Lang3         CSTRING(512)
Lang4         CSTRING(512)
Lang5         CSTRING(512)
Lang6         CSTRING(512)
Lang7         CSTRING(512)
```

```
Lang8      CSTRING(512)
Lang9      CSTRING(512)
Lang10     CSTRING(512)
Lang11     CSTRING(512)
Lang12     CSTRING(512)
Lang13     CSTRING(512)
Lang14     CSTRING(512)
Lang15     CSTRING(512)
Lang16     CSTRING(512)
Lang17     CSTRING(512)
Lang18     CSTRING(512)
Lang19     CSTRING(512)
Lang20     CSTRING(512)
Lang21     CSTRING(512)
Lang22     CSTRING(512)
Lang23     CSTRING(512)
Lang24     CSTRING(512)
Lang25     CSTRING(512)
Lang26     CSTRING(512)
Lang27     CSTRING(512)
Lang28     CSTRING(512)
          END
          END
```

### 1.11.1 File Placements by Installer

#### File Placement

#### **%Root%\3rdParty\template** directory

```
BoTran2.tpl
BoTranL2.tpw
```

#### **%Root%\3rdParty\Libsrc** directory

```
BoTranLx2.inc  !Legacy
BoTranLx2.clw  !Legacy
BoTranAB.TRN  !ABC and Legacy
BoTranCL.TRN  !Legacy
BoTranRP.TRN  !Legacy
```

#### **%Root%\Libsrc** directory (ABC files)

```
BoTranx2.inc   !ABC
BoTranx2.clw   !ABC
```

#### **%Root%\Bin** directory

```
ReadTrn2.exe  !reads utility text files to add to BTL and BTS files
              !C6 Source included to change environment to read your language
```

**%Root%\3rdParty\Examples\Comsoft7\BoTran2** directory  
Examples and source files for utility apps.

### 1.11.2 Hooks

The Following hooks are provided by BoTran2 to translate the Titles and or Captions and Text used by the various methods.

```
{PROP:Libhook, 1} PROP:ColorDialogHook
{PROP:Libhook, 2} PROP:FileDialogHook
{PROP:Libhook, 3} PROP:FontDialogHook
{PROP:Libhook, 4} PROP:PrinterDialogHook
{PROP:Libhook, 5} PROP:HaltHook
{PROP:Libhook, 6} PROP:MessageHook
{PROP:Libhook, 7} PROP:StopHook
```

These are provided "late" in initializing the app, so they will intercept the text, translate it, and pass it on to the default or previously installed hooks by the Developer or 3rdParty provider such as MessageBox by Capesoft(tm).



### 1.11.3 CPCS Reports

BoTran2 adds the line `Translator.TranslateWindow(Report)` to the **CPCS** reports to translate them.

The BoTran2 **CPCS support** Translates the following Values:

```

CPCS:ProgWinTitlePrvw = Translator.BTStr(CPCS:ProgWinTitlePrvw)
CPCS:ProgWinTitlePrnt = Translator.BTStr(CPCS:ProgWinTitlePrnt)
CPCS:ProgWinPctText   = Translator.BTStr(CPCS:ProgWinPctText)
CPCS:ProgWinRecText   = Translator.BTStr(CPCS:ProgWinRecText)
CPCS:ProgWinUsrText   = Translator.BTStr(CPCS:ProgWinUsrText)
CPCS:PrtrDlgTitle     = Translator.BTStr(CPCS:PrtrDlgTitle)
CPCS:AskPrvwDlgTitle  = Translator.BTStr(CPCS:AskPrvwDlgTitle)
CPCS:AskPrvwDlgText   = Translator.BTStr(CPCS:AskPrvwDlgText)
CPCS:AreYouSureTitle  = Translator.BTStr(CPCS:AreYouSureTitle)
CPCS:AreYouSureText   = Translator.BTStr(CPCS:AreYouSureText)
CPCS:PrvwPartialTitle = Translator.BTStr(CPCS:PrvwPartialTitle)
CPCS:PrvwPartialText  = Translator.BTStr(CPCS:PrvwPartialText)
CPCS:NoDfltPrtrTitle  = Translator.BTStr(CPCS:NoDfltPrtrTitle)
CPCS:NoDfltPrtrText   = Translator.BTStr(CPCS:NoDfltPrtrText)
CPCS:NthgToPrvwTitle  = Translator.BTStr(CPCS:NthgToPrvwTitle)
CPCS:NthgToPrvwText   = Translator.BTStr(CPCS:NthgToPrvwText)
CPCS:NthgToPrntTitle  = Translator.BTStr(CPCS:NthgToPrntTitle)
CPCS:NthgToPrntText   = Translator.BTStr(CPCS:NthgToPrntText)
CPCS:AsciiOutTitle    = Translator.BTStr(CPCS:AsciiOutTitle)
CPCS:AsciiOutmasks    = Translator.BTStr(CPCS:AsciiOutmasks)
CPCS:DynLblErrTitle   = Translator.BTStr(CPCS:DynLblErrTitle)
CPCS:DynLblErrText1   = Translator.BTStr(CPCS:DynLblErrText1)
CPCS:DynLblErrText2   = Translator.BTStr(CPCS:DynLblErrText2)
CPCS:ButtonYesNoCancel = Translator.BTStr(CPCS:ButtonYesNoCancel)
CPCS:ButtonNoYes      = Translator.BTStr(CPCS:ButtonNoYes)
CPCS:ButtonNoYesIgnore = Translator.BTStr(CPCS:ButtonNoYesIgnore)
CPCS:ButtonYes        = Translator.BTStr(CPCS:ButtonYes)

```

### 1.11.4 Locale ENV Support

BoTran2 contains some "Environmental Switches " to do its magic.

They are called

```

_ENV:EntryToText           ! BoTran2 method Flag
_ENV:ReposEntryPrompt     ! BoTran2 method Flag
_ENV:ReverseListFormat    ! BoTran2 method Flag
_ENV:KeyboardLayout (not implemented at this time)
_ENV:CLASYSYSTEMCHARSET

```

**\_ENV:CLACOLSEQ**  
**\_ENV:CLADIGRAPH**  
**\_ENV:CLACASE**

These are used by BoTran2 to setup the local environment in the language changes. They use the default window settings when left blank, and your settings if you add them.

The BoTran2 Global template offers **Locale** support for the **ABC Chain and Legacy Chain**



Look for the values in quotes to change in your BTL translation File when selecting the following Locale choices:

#### Translate AM,PM values

- `LOCALE('CLAAMPM',BTMan.BTStr('AM,PM'))`

#### Translate Long Month values

- `LOCALE('CLAMONTH',BTMan.BTStr('January,February,March,April,May,June,July,August,September,October,November,December'))`

#### Translate Short Month values

- `LOCALE('CLAMON',BTMan.BTStr('Jan,Feb,Mar,Apr,May,Jun,Jul,Aug,Sep,Oct,Nov,Dec'))`

))

### Translate MSG Button values

- LOCALE('CLABUTTON',BTMan.BTStr('OK,&Yes,&No,&Abort,&Retry,&Ignore,Cancel,&Help'))

### Translate ErrorCode() values

- LOCALE('CLAMSG2',Self.BTStr('File Not Found'))
- LOCALE('CLAMSG3',Self.BTStr('Path Not Found'))
- LOCALE('CLAMSG4',Self.BTStr('Too Many Open Files'))
- LOCALE('CLAMSG5',Self.BTStr('Access Denied'))
- LOCALE('CLAMSG7',Self.BTStr('Memory Corrupted'))
- LOCALE('CLAMSG8',Self.BTStr('Insufficient Memory'))
- LOCALE('CLAMSG15',Self.BTStr('Invalid Drive'))
- LOCALE('CLAMSG30',Self.BTStr('Entry Not Found'))
- LOCALE('CLAMSG32',Self.BTStr('File Is Already Locked'))
- LOCALE('CLAMSG33',Self.BTStr('Record Not Available'))
- LOCALE('CLAMSG35',Self.BTStr('Record Not Found'))
- LOCALE('CLAMSG36',Self.BTStr('Invalid Data File'))
- LOCALE('CLAMSG37',Self.BTStr('File Not Open'))
- LOCALE('CLAMSG38',Self.BTStr('Invalid Key File'))
- LOCALE('CLAMSG40',Self.BTStr('Creates Duplicate Key'))
- LOCALE('CLAMSG43',Self.BTStr('Record Is Already Held'))
- LOCALE('CLAMSG45',Self.BTStr('Invalid Filename'))
- LOCALE('CLAMSG46',Self.BTStr('Key Files must be Rebuilt'))
- LOCALE('CLAMSG47',Self.BTStr('Invalid File Declaration'))
- LOCALE('CLAMSG48',Self.BTStr('Unable to log transaction'))
- LOCALE('CLAMSG52',Self.BTStr('File Already Open'))
- LOCALE('CLAMSG54',Self.BTStr('No Create Attribute'))
- LOCALE('CLAMSG55',Self.BTStr('File Must Be Shared'))
- LOCALE('CLAMSG56',Self.BTStr('Logout Already Active'))
- LOCALE('CLAMSG57',Self.BTStr('Invalid Memo File'))
- LOCALE('CLAMSG63',Self.BTStr('Exclusive Access Required'))
- LOCALE('CLAMSG64',Self.BTStr('Sharing Violation'))
- LOCALE('CLAMSG65',Self.BTStr('Unable to rollback transaction'))
- LOCALE('CLAMSG73',Self.BTStr('Memo File is Missing'))
- LOCALE('CLAMSG75',Self.BTStr('Invalid Field Type Descriptor'))
- LOCALE('CLAMSG76',Self.BTStr('Invalid Index String'))
- LOCALE('CLAMSG77',Self.BTStr('Unable To Access Index'))
- LOCALE('CLAMSG78',Self.BTStr('Invalid Number Of Parameters'))
- LOCALE('CLAMSG79',Self.BTStr('Unsupported Data Type in File'))
- LOCALE('CLAMSG80',Self.BTStr('Function not supported'))
- LOCALE('CLAMSG88',Self.BTStr('Invalid Key Length'))
- LOCALE('CLAMSG89',Self.BTStr('Record Changed By Another Station'))

- LOCALE('CLAMSG90',Self.BTStr('File System Error'))
- LOCALE('CLAMSG91',Self.BTStr('No Logout Active'))
- LOCALE('CLAMSG92',Self.BTStr('BUILD in Progress'))
- LOCALE('CLAMSG93',Self.BTStr('BUILD Cancelled'))
- LOCALE('CLAMSG94',Self.BTStr('Record limit exceeded'))
- LOCALE('CLAMSG97',Self.BTStr('Stream Error'))
- LOCALE('CLAMSG100',Self.BTStr('Trigger Error'))

### 1.11.5 Built In Switches

BoTran2 has a number of Built in Switches and variables that may be useful to the programmer for precise control of BoTran2.

The first Three are loaded thru the translation file to change properties in the application running.

**Translator.Entry2Text** Enables converting Entry to Text Fields.(1)

**Translator.ReposPrompts** Prop:layout in C6, reverses prompts and entry fields in older Clarion versions(C4-C55x), right justifies text

**Translator.ReverseFormat** Reverses justification from left to right in listboxes in all Clarion versions, reverses field orders in older Clarion(C4-C55x) versions.

The following switches are used to setup BoTran2 for runtime and usually controlled by the templates.

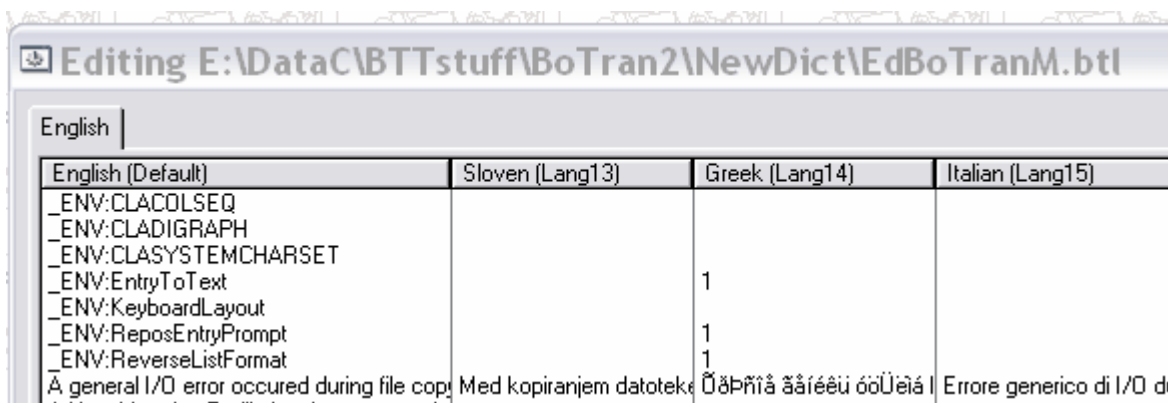
**Translator.StopTranslate** Stops Translating the app.(0)

**Translator.UseQueue** Uses a queue for translation(1) or direct File access(0)

**Translator.Silence** Do not report BoTran2 File errors(1)

**Translator.NoFileUpdate** Do not add entries to BoTran2 Language File(1)

#### 1.11.5.1 Entry to Text



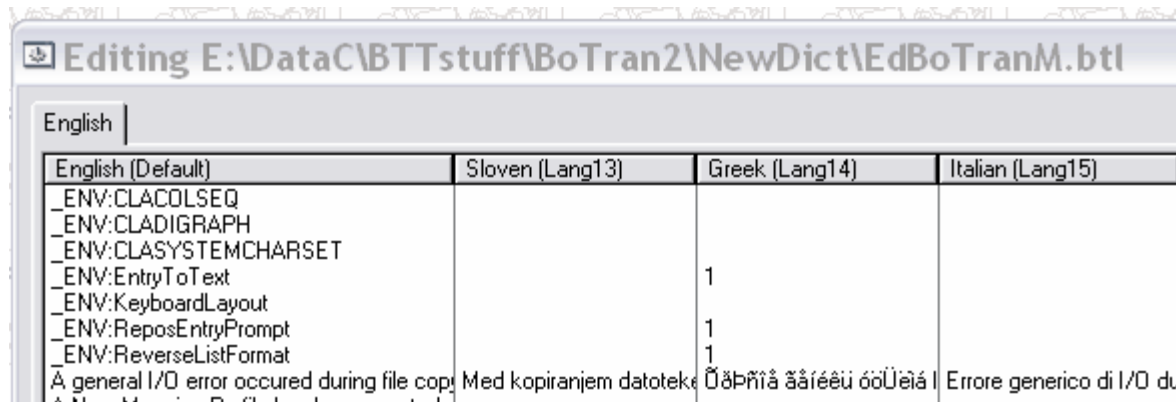
Notice in the EdBoTranM Utility, the above screen shot shows there is an environmental

switch,

### **\_ENV:EntryToText**

When this field contains a 1, the Entry fields will automatically be converted to text in the app for the appropriate language.

#### 1.11.5.2 ReposEntryPrompt



Setting the **\_ENV:ReposEntryPrompt** to 1 will Tell BoTran2 to do the following:

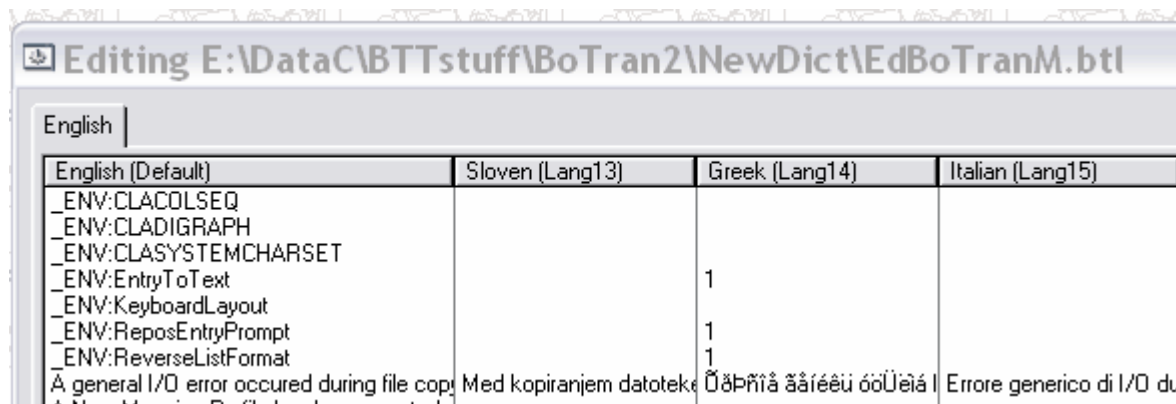
Added flag **ReposEntryPrompt**

Added method **BoTran2.Reposition** to reposition prompts and entry controls for Arabic, Hebrew type languages. (C4-C55x)

Right Justifies the text in Entry controls and entry2text controls.

Uses [prop:layout](#) in C6.

#### 1.11.5.3 ReverseListFormat



Added flag **ReverseListFormat**

When **\_ENV:ReverseListFormat** is set to 1 :

Added method **BoTran2.RevFormat** to reformat List and combo boxes to right justify, and

mirror image of order the fields are displayed.(C4-C55x)

In C6, it works with [prop:layout](#) to reverse the listbox sequence of fields, and just right justifies the text type fields.

## 2 Redirection File

You may have to make some changes to your Redirection file to use BoTran2.

If you have installed any Capesoft Product or other "C3PA" compliant product most of these changes will have been made for you.

Below is an example of my C60EE.RED file showing the [key components added or changed](#) for BoTran2 to work.

### -- Bo's Default Redirection for Clarion 6

```
[Debug32]
*.obj = .\Compile;%ROOT%\obj32
*.res = .\Compile;%ROOT%\obj32
*.rsc = .\Compile;%ROOT%\obj32

[Release32]
*.obj = .\Compile;%ROOT%\obj32\release
*.res = .\Compile;%ROOT%\obj32\release
*.rsc = .\Compile;%ROOT%\obj32\release

[Common]
*.clw=. \Source;%ROOT%\libsrc;%ROOT%\3RDPARTY\LibSrc
*.inc=. \Source;%ROOT%\libsrc;%ROOT%\3RDPARTY\LibSrc
*.dll=.;%ROOT%\bin;%ROOT%\3RDPARTY\Bin
*.IPS=.
*.IPC=.
*.tp?=%ROOT%\Template;%ROOT%\3RDPARTY\Template
*.trf=%ROOT%\template
*.txs=%ROOT%\template;%ROOT%\3RDPARTY\Template
*.stt=%ROOT%\template;%ROOT%\3RDPARTY\Template
*.lib=. \lib;.;%ROOT%\lib;%ROOT%\3RDPARTY\Lib
*.obj=. \Compile;%ROOT%\lib
*.res=. \Compile;%ROOT%\lib
*.RSC=. \Compile;%ROOT%\3RDPARTY\Rsc
*.$$$=.
*.btw=. \info
*.txa=. \info
*.txd=. \info
```

```
*.TXT=.\\info
*.emb=.\\info
*.get=.\\info
*.sql=.\\info
*.tre=.\\info
*.exp=.\\shp
*.shp=.\\shp
*.map=.\\shp
*.cur=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%R
OOT%\\3RDPARTY\\Template
*.jpg=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%R
OOT%\\3RDPARTY\\Template
*.gif=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%RO
OT%\\3RDPARTY\\Template
*.WMF=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%
ROOT%\\3RDPARTY\\Template
*.BMP=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%
ROOT%\\3RDPARTY\\Template
*.ICO=.;.\\images;%ROOT%\\images;%ROOT%\\3RDPARTY\\Images;%ROOT%\\template;%R
OOT%\\3RDPARTY\\Template
*.exe=.
*.app=.
*.dct=.
*.*=.\\compile;.;%ROOT%\\examples;%ROOT%\\libsrc;%ROOT%\\images;%ROOT%\\template;
%ROOT%\\consrc;%ROOT%\\3rdparty\\Images;%ROOT%\\3RDPARTY\\LibSrc;%ROOT%\\3R
DPARTY\\bin
```

### 3 BoTran2 TRN Files

BoTran2 uses English as the default Language for creating the templates and classes.

If you are creating your app in English as the Default Language, you don't need to do anything with the accompanying TRN files unless you want to change or customize some of the Messages used for errors, etc.

If you are using ABC Chain or Legacy, you need to fill out:

[BoTranAB.TRN](#)

If you are using Legacy, you need to fill out:

[BoTranAB.TRN](#)

[BoTranCL.TRN](#)

If you are using the BoTran2 Translatable Legacy Previewer you need to fill out:

[BoTranRP.TRN](#)

If English is not the Default Language used by your app, then Edit the ,REPLACE("") property

in each string you want to substitute your alternate Language text for. This is a **one time thing**, as it re-uses these files for creating each new Language file for each app. BoTran2 uses these files and translations for establishing the "default text" for its print preview, Error Messages, Locale settings, and legacy error messages. BoTran2 Reads in your ABERROR.TRN to get your default errors in ABC Chain.

BoTran2 creates a "\*.BTS" or BoTran2 Substitution file that replaces any TRN and ENV files that need to be shipped with your app for the different Languages you wish to Translate too. This will translate your main app, and will not necessarily translate any 3rd Party add on's, unless they are specifically mentioned as being supported by BoTran2. See [Compatibility](#). I am adding 3rd Party support as the vendors come forward, or helping them add support for BoTran2.

### 3.1 BoTranAB.TRN

```

=====
! The following Group Is used by BoTran2 To Load the default
! Locale settings into the Application.
! IF you are USING defaults other than English,
! Add any replacement TEXT into the REPLACE("") area.
! DO not use quotes except beginning and END OF strings.
! IF you leave it blank, the Defaults(English) will be used.
! DO NOT CHANGE THE LOCALE OR DEFAULT STRINGS!!!
=====
! 1 = Convert Entry TO TEXT
LOCALE('_ENV:EntryToText'),DEFAULT('_ENV:EntryToText'),REPLACE('0')
! 1 = Reposition Entry and Prompt, right justify entry  New **** August 2008
LOCALE('_ENV:ReposEntryPrompt'),DEFAULT('_ENV:ReposEntryPrompt'),REPLACE('0')
! 1 = Reverse List box formats, and change to right justify default.  New **** August 2008
LOCALE('_ENV:ReverseListFormat'),DEFAULT('_ENV:ReverseListFormat'),REPLACE('0')
! Not Implemented
LOCALE('_ENV:KeyboardLayout'),DEFAULT('_ENV:KeyboardLayout'),REPLACE('US')
! CHARSET:ANSI
LOCALE('_ENV:CLASYSTEMCHARSET'),DEFAULT('_ENV:CLASYSTEMCHARSET'),
REPLACE('CHARSET:ANSI')
LOCALE('_ENV:CLACOLSEQ'),DEFAULT('_ENV:CLACOLSEQ'),REPLACE("")
LOCALE('_ENV:CLADIGRAPH'),DEFAULT('_ENV:CLADIGRAPH'),REPLACE("")
LOCALE('_ENV:CLACASE'),DEFAULT('_ENV:CLACASE'),REPLACE("")
LOCALE('_ENV:CLABUTTON'),DEFAULT(
'OK,&Yes,&No,&Abort,&Retry,&Ignore,Cancel,&Help'),REPLACE("")
LOCALE('_ENV:CLABUTTON1'),DEFAULT('OK'),REPLACE("")
LOCALE('_ENV:CLABUTTON2'),DEFAULT('&Yes'),REPLACE("")
LOCALE('_ENV:CLABUTTON3'),DEFAULT('&No'),REPLACE("")
LOCALE('_ENV:CLABUTTON4'),DEFAULT('&Abort'),REPLACE("")
LOCALE('_ENV:CLABUTTON5'),DEFAULT('&Retry'),REPLACE("")
LOCALE('_ENV:CLABUTTON6'),DEFAULT('&Ignore'),REPLACE("")

```

```
LOCALE('_ENV:CLABUTTON7'),DEFAULT('Cancel'),REPLACE("")
LOCALE('_ENV:CLABUTTON8'),DEFAULT('&Help'),REPLACE("")
LOCALE('_ENV:CLAAMPM'),DEFAULT('AM,PM'),REPLACE("")
LOCALE('_ENV:CLAMONTH'),DEFAULT(
'January,February,March,April,May,June,July,August,September,October,November,Decem
ber'),REPLACE("")
LOCALE('_ENV:CLAMON'),DEFAULT('Jan,Feb,Mar,Apr,May,Jun,Jul,Aug,Sep,Oct,Nov,Dec'
),REPLACE("")
```

```
!=====
```

! The following Messages are used by BoTran2 TO Load the "default"

! Locale settings into the Application.

! Add any replacement TEXT into the REPLACE("") area.

! IF you leave it blank, the Defaults(English) will be used.

! DO NOT CHANGE THE LOCALE OR DEFAULT STRINGS!!!

```
!=====
```

```
LOCALE('_ENV:CLAMSG2'),DEFAULT('File Not Found'),REPLACE("")
LOCALE('_ENV:CLAMSG3'),DEFAULT('Path Not Found'),REPLACE("")
LOCALE('_ENV:CLAMSG4'),DEFAULT('Too Many Open Files'),REPLACE("")
LOCALE('_ENV:CLAMSG5'),DEFAULT('Access Denied'),REPLACE("")
LOCALE('_ENV:CLAMSG7'),DEFAULT('Memory Corrupted'),REPLACE("")
LOCALE('_ENV:CLAMSG8'),DEFAULT('Insufficient Memory'),REPLACE("")
LOCALE('_ENV:CLAMSG15'),DEFAULT('Invalid Drive'),REPLACE("")
LOCALE('_ENV:CLAMSG30'),DEFAULT('Entry Not Found'),REPLACE("")
LOCALE('_ENV:CLAMSG32'),DEFAULT('File Is Already Locked'),REPLACE("")
LOCALE('_ENV:CLAMSG33'),DEFAULT('Record Not Available'),REPLACE("")
LOCALE('_ENV:CLAMSG35'),DEFAULT('Record Not Found'),REPLACE("")
LOCALE('_ENV:CLAMSG36'),DEFAULT('Invalid Data File'),REPLACE("")
LOCALE('_ENV:CLAMSG37'),DEFAULT('File Not Open'),REPLACE("")
LOCALE('_ENV:CLAMSG38'),DEFAULT('Invalid Key File'),REPLACE("")
LOCALE('_ENV:CLAMSG40'),DEFAULT('Creates Duplicate Key'),REPLACE("")
LOCALE('_ENV:CLAMSG43'),DEFAULT('Record Is Already Held'),REPLACE("")
LOCALE('_ENV:CLAMSG45'),DEFAULT('Invalid Filename'),REPLACE("")
LOCALE('_ENV:CLAMSG46'),DEFAULT('Key Files must be Rebuilt'),REPLACE("")
LOCALE('_ENV:CLAMSG47'),DEFAULT('Invalid File Declaration'),REPLACE("")
LOCALE('_ENV:CLAMSG48'),DEFAULT('Unable to log transaction'),REPLACE("")
LOCALE('_ENV:CLAMSG52'),DEFAULT('File Already Open'),REPLACE("")
LOCALE('_ENV:CLAMSG54'),DEFAULT('No Create Attribute'),REPLACE("")
LOCALE('_ENV:CLAMSG55'),DEFAULT('File Must Be Shared'),REPLACE("")
LOCALE('_ENV:CLAMSG56'),DEFAULT('Logout Already Active'),REPLACE("")
LOCALE('_ENV:CLAMSG57'),DEFAULT('Invalid Memo File'),REPLACE("")
LOCALE('_ENV:CLAMSG63'),DEFAULT('Exclusive Access Required'),REPLACE("")
LOCALE('_ENV:CLAMSG64'),DEFAULT('Sharing Violation'),REPLACE("")
LOCALE('_ENV:CLAMSG65'),DEFAULT('Unable to rollback transaction'),REPLACE("")
LOCALE('_ENV:CLAMSG73'),DEFAULT('Memo File is Missing'),REPLACE("")
LOCALE('_ENV:CLAMSG75'),DEFAULT('Invalid Field Type Descriptor'),REPLACE("")
LOCALE('_ENV:CLAMSG76'),DEFAULT('Invalid Index String'),REPLACE("")
LOCALE('_ENV:CLAMSG77'),DEFAULT('Unable To Access Index'),REPLACE("")
```

```

LOCALE('_ENV:CLAMSG78'),DEFAULT('Invalid Number Of Parameters'),REPLACE("")
LOCALE('_ENV:CLAMSG79'),DEFAULT('Unsupported Data Type in File'),REPLACE("")
LOCALE('_ENV:CLAMSG80'),DEFAULT('Function not supported'),REPLACE("")
LOCALE('_ENV:CLAMSG88'),DEFAULT('Invalid Key Length'),REPLACE("")
LOCALE('_ENV:CLAMSG89'),DEFAULT('Record Changed By Another Station'),REPLACE("")
)
LOCALE('_ENV:CLAMSG90'),DEFAULT('File System Error'),REPLACE("")
LOCALE('_ENV:CLAMSG91'),DEFAULT('No Logout Active'),REPLACE("")
LOCALE('_ENV:CLAMSG92'),DEFAULT('BUILD in Progress'),REPLACE("")
LOCALE('_ENV:CLAMSG93'),DEFAULT('BUILD Cancelled'),REPLACE("")
LOCALE('_ENV:CLAMSG94'),DEFAULT('Record limit exceeded'),REPLACE("")
LOCALE('_ENV:CLAMSG97'),DEFAULT('Stream Error'),REPLACE("")
LOCALE('_ENV:CLAMSG100'),DEFAULT('Trigger Error'),REPLACE("")

```

### 3.2 BoTranCL.TRN

```

!=====
! The following Strings are used IN Legacy Error Messages by BoTran2
! IF English IS "NOT" your default Language FOR the app, Please
! Add any replacement TEXT into the REPLACE("") area.
! IF you leave it blank, the Default will be used.
! DO NOT CHANGE THE DEFAULT STRINGS!!!
!=====

```

```

DEFAULT('OK'),REPLACE("")
DEFAULT('&Yes'),REPLACE("")
DEFAULT('&No'),REPLACE("")
DEFAULT('&Abort'),REPLACE("")
DEFAULT('&Retry'),REPLACE("")
DEFAULT('&Ignore'),REPLACE("")
DEFAULT('Cancel'),REPLACE("")
DEFAULT('&Help'),REPLACE("")
DEFAULT('Error: ('),REPLACE("")
DEFAULT(') accessing'),REPLACE("")
DEFAULT('). Press OK to end this application. '),REPLACE("")
DEFAULT('Invalid File'),REPLACE("")
DEFAULT('Invalid File!'),REPLACE("")
DEFAULT(' key file is invalid. Do you want to rebuild the key? '),REPLACE("")
DEFAULT('Invalid Key'),REPLACE("")
DEFAULT('Invalid Key!'),REPLACE("")
DEFAULT('Error: ('),REPLACE("")
DEFAULT(') repairing key for'),REPLACE("")
DEFAULT('). Press OK to end this application. '),REPLACE("")
DEFAULT('Key Rebuild Error'),REPLACE("")
DEFAULT('Error Rebuilding Key!'),REPLACE("")
DEFAULT('Error: ('),REPLACE("")
DEFAULT(') creating'),REPLACE("")
DEFAULT('). Press OK to end this application. '),REPLACE("")
DEFAULT('File Creation Error'),REPLACE("")

```

```
DEFAULT('File Creation Error!'),REPLACE("")
DEFAULT('Error: ('),REPLACE("")
DEFAULT(' opening created file:'),REPLACE("")
DEFAULT(' Press OK to end this application. '),REPLACE("")
DEFAULT('File Creation Error'),REPLACE("")
DEFAULT('File Creation Error!'),REPLACE("")
DEFAULT('The Procedure'),REPLACE("")
DEFAULT('has not been defined. '),REPLACE("")
DEFAULT('Procedure not defined'),REPLACE("")
DEFAULT('Unable to read keyed record. Error: '),REPLACE("")
DEFAULT(' Insert Aborted'),REPLACE("")
DEFAULT('The value of'),REPLACE("")
DEFAULT('must be lower than'),REPLACE("")
DEFAULT('Range Error'),REPLACE("")
DEFAULT('The value of'),REPLACE("")
DEFAULT('must be higher than'),REPLACE("")
DEFAULT('Range Error'),REPLACE("")
DEFAULT('The value of'),REPLACE("")
DEFAULT('must be between'),REPLACE("")
DEFAULT('Range Error'),REPLACE("")
DEFAULT('The value for'),REPLACE("")
DEFAULT('must be found in the'),REPLACE("")
DEFAULT('file. '),REPLACE("")
DEFAULT('Field Contents Error'),REPLACE("")
DEFAULT('This record is referenced from the file'),REPLACE("")
DEFAULT('Linking field(s) have been restricted from change and have been reset to original
values. '),REPLACE("")
DEFAULT('Referential Integrity Update Error'),REPLACE("")
DEFAULT('This record is referenced from the file'),REPLACE("")
DEFAULT(' This record cannot be deleted while these references exist. '),REPLACE("")
DEFAULT('Referential Integrity Delete Error'),REPLACE("")
DEFAULT('An error was experienced during the update of record. Error: '),REPLACE("")
DEFAULT('Record Insert Error'),REPLACE("")
DEFAULT('An error ( '),REPLACE("")
DEFAULT(' ) was experienced'),REPLACE("")
DEFAULT('when attempting to update a record from the file. Probable Cause: '),REPLACE("
)
DEFAULT('Update Operation Error'),REPLACE("")
DEFAULT('This record was changed by another station. '),REPLACE("")
DEFAULT('Update Operation Error'),REPLACE("")
DEFAULT('This record was changed by another station. '),REPLACE("")
DEFAULT('Those changes will now be displayed. Use the Ditto Button or Ctrl+ '),REPLACE("
)
DEFAULT('to recall your changes. '),REPLACE("")
DEFAULT('Record Was Not Updated'),REPLACE("")
DEFAULT('An error was experienced changing this record. '),REPLACE("")
DEFAULT('Do you want to try to save again? '),REPLACE("")
```

DEFAULT('Record Update Error'),REPLACE("")  
DEFAULT('An error (',REPLACE("")  
DEFAULT(') was experienced'),REPLACE("")  
DEFAULT('when attempting to delete a record from the file'),REPLACE("")  
DEFAULT('Delete Operation Error'),REPLACE("")  
DEFAULT('An error was experienced deleting this record. '),REPLACE("")  
DEFAULT('Do you want to try to save again?'),REPLACE("")  
DEFAULT('Record Update Error'),REPLACE("")  
DEFAULT('This procedure was called to insert a record, '),REPLACE("")  
DEFAULT('however inserts are not allowed for this procedure. Press OK'),REPLACE("")  
DEFAULT('to return to the calling procedure'),REPLACE("")  
DEFAULT('Invalid Request'),REPLACE("")  
DEFAULT('This procedure was called to change a record, '),REPLACE("")  
DEFAULT('however changes are not allowed for this procedure. Press OK'),REPLACE("")  
DEFAULT('to return to the calling procedure'),REPLACE("")  
DEFAULT('Invalid Request'),REPLACE("")  
DEFAULT('This procedure was called to delete a record, '),REPLACE("")  
DEFAULT('however deletions are not allowed for this procedure. Press OK'),REPLACE("")  
DEFAULT('to return to the calling procedure'),REPLACE("")  
DEFAULT('Invalid Request'),REPLACE("")  
DEFAULT('The File'),REPLACE("")  
DEFAULT('was not found, '),REPLACE("")  
DEFAULT('and creation of the file is not allowed. Press OK to end'),REPLACE("")  
DEFAULT('this application. '),REPLACE("")  
DEFAULT('File Creation Not Allowed'),REPLACE("")  
DEFAULT('File Creation Error!'),REPLACE("")  
DEFAULT('Are you sure you want to cancel?'),REPLACE("")  
DEFAULT('Update Cancelled'),REPLACE("")  
DEFAULT('Adding this record creates a duplicate entry for the key: '),REPLACE("")  
DEFAULT('Duplicate Key Error'),REPLACE("")  
DEFAULT('Attempts to automatically number this record have failed. Error: '),REPLACE("")  
DEFAULT('Auto Increment Error'),REPLACE("")  
DEFAULT('File Load Error. Error: '),REPLACE("")  
DEFAULT('File Load Error'),REPLACE("")  
DEFAULT('Are you certain you want to stop loading'),REPLACE("")  
DEFAULT('Cancel Request'),REPLACE("")  
DEFAULT('File Load Error. '),REPLACE("")  
DEFAULT('The file you've requested contains no TEXT. '),REPLACE("")  
DEFAULT('File Load Error'),REPLACE("")  
DEFAULT('The end of the viewed file was encountered. '),REPLACE("")  
DEFAULT('Do you want to start again from the beginning?'),REPLACE("")  
DEFAULT('End of File Error'),REPLACE("")  
DEFAULT('The beginning of the viewed file was encountered. '),REPLACE("")  
DEFAULT('Do you want to start again from the end of the file?'),REPLACE("")  
DEFAULT('Beginning of File Error'),REPLACE("")  
DEFAULT('File (',REPLACE("")  
DEFAULT(') could not be opened. Error: '),REPLACE("")

```

DEFAULT('File Access Error'),REPLACE("")
DEFAULT('An error was experienced when making changes to the'),REPLACE("")
DEFAULT('file. Error:'),REPLACE("")
DEFAULT('Process PUT Error'),REPLACE("")
DEFAULT('An error was experienced when deleting a record from the'),REPLACE("")
DEFAULT('file. Error:'),REPLACE("")
DEFAULT('Process DELETE Error'),REPLACE("")
DEFAULT('You've selected TO delete the highlighted record. '),REPLACE("")
DEFAULT('Press OK to confirm deletion of this record. '),REPLACE("")
DEFAULT('Confirm Delete'),REPLACE("")
DEFAULT('Do you want to save the changes to this record?'),REPLACE("")
DEFAULT('Update Cancelled'),REPLACE("")
DEFAULT('Error: ( '),REPLACE("")
DEFAULT(') attempting to frame the '),REPLACE("")
DEFAULT('transaction on'),REPLACE("")
DEFAULT('transaction cancelled. '),REPLACE("")
DEFAULT('Transaction Framing Error'),REPLACE("")
DEFAULT('Error: ( '),REPLACE("")
DEFAULT(') attempting to access a record from the '),REPLACE("")
DEFAULT('file. Returning to previous window. '),REPLACE("")
DEFAULT('Record Retrieval Error'),REPLACE("")
DEFAULT('Error: ( '),REPLACE("")
DEFAULT(') attempting to open the current VIEW. Filter and Range Limits ignored. '),
REPLACE("")
DEFAULT('View Open Error'),REPLACE("")
DEFAULT('This record has been added to the file. Do you want to add another record?'),
REPLACE("")
DEFAULT('Record Added'),REPLACE("")

```

### 3.3 BoTranRP.TRN

```

=====
! The following Strings are used by BoTran2 For the Replacement
! Translatable Report Previewer. This is used in Legacy Chain.
! If English is not your default Language for the app, Please
! Add any replacement text into the REPLACE("") area.
! If you leave it blank, the Defaults(English) will be used for
! the default Language.
! DO NOT CHANGE THE DEFAULT STRINGS!!!
=====
DEFAULT('Report Preview'),REPLACE("")
DEFAULT('&File'),REPLACE("")
DEFAULT('&Print'),REPLACE("")
DEFAULT('Print the report'),REPLACE("")
DEFAULT('E&xit'),REPLACE("")
DEFAULT('Exit without printing the report'),REPLACE("")
DEFAULT('&View'),REPLACE("")
DEFAULT('&Next Page(s)'),REPLACE("")

```

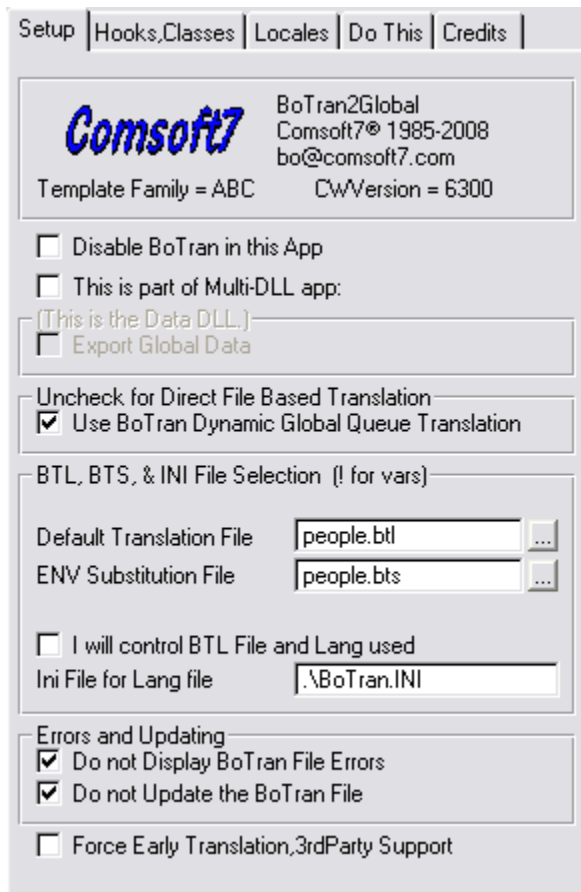
DEFAULT('View the next page or pages of the report'),REPLACE("")  
 DEFAULT('&Previous Page(s)'),REPLACE("")  
 DEFAULT('View the next page or pages of the report'),REPLACE("")  
 DEFAULT('&Jump to a page'),REPLACE("")  
 DEFAULT('Jump to a specific page of the report'),REPLACE("")  
 DEFAULT('&Change Display'),REPLACE("")  
 DEFAULT('Change the number of pages displayed'),REPLACE("")  
 DEFAULT('&Zoom'),REPLACE("")  
 DEFAULT('No &Zoom'),REPLACE("")  
 DEFAULT('Page &Width'),REPLACE("")  
 DEFAULT('&50 Percent'),REPLACE("")  
 DEFAULT('&75 Percent'),REPLACE("")  
 DEFAULT('&100 Percent'),REPLACE("")  
 DEFAULT('&200 Percent'),REPLACE("")  
 DEFAULT('&300 Percent'),REPLACE("")  
 DEFAULT('Print this report'),REPLACE("")  
 DEFAULT('Exit without printing the report'),REPLACE("")  
 DEFAULT('Zoom in on a page of the report'),REPLACE("")  
 DEFAULT('&Page:'),REPLACE("")  
 DEFAULT('&Across:'),REPLACE("")  
 DEFAULT('Select the number of thumbnails in a row'),REPLACE("")  
 DEFAULT('&Down:'),REPLACE("")  
 DEFAULT('Select the number of thumbnails in a column'),REPLACE("")  
 DEFAULT('Enter a page number from 1 to'),REPLACE("")  
 DEFAULT('Page Width'),REPLACE("")  
 DEFAULT('No Zoom'),REPLACE("")  
 DEFAULT('Page'),REPLACE("")  
 DEFAULT('Pages'),REPLACE("")  
 DEFAULT('of'),REPLACE("")  
 DEFAULT('Zoom (Page Width)'),REPLACE("")  
 DEFAULT('Zoom (50%%)'),REPLACE("")  
 DEFAULT('Zoom (75%%)'),REPLACE("")  
 DEFAULT('Zoom (100%%)'),REPLACE("")  
 DEFAULT('Zoom (200%%)'),REPLACE("")  
 DEFAULT('Zoom (300%%)'),REPLACE("")  
 DEFAULT('Jump to a Report Page'),REPLACE("")  
 DEFAULT('&Page:'),REPLACE("")  
 DEFAULT('Select a page of the report'),REPLACE("")  
 DEFAULT('OK'),REPLACE("")  
 DEFAULT('Jump to the selected page'),REPLACE("")  
 DEFAULT('Cancel'),REPLACE("")  
 DEFAULT('Cancel this selection'),REPLACE("")  
 DEFAULT('Change the Report Display'),REPLACE("")  
 DEFAULT('Pages Displayed'),REPLACE("")  
 DEFAULT('Across'),REPLACE("")  
 DEFAULT('Down'),REPLACE("")

## 4 Templates

- + Class BoTpl - Misc Collection Templates
- + Class BoTran - Translate Templates
- Class BoTran2 - Translate Templates
  - Control Templates
    - BoTran2Lang - BoTran2 Select Language Control V1.0
    - BoTran2ReportLang - BoTran2 Select Report Language Control V1.0
  - Code Templates
    - BoTran2Special - Special Translations on Controls V1.0
  - Extension Templates
    - BoTran2Ext - Add Translate to This Procedure V1.0
    - BoTran2Global - Activate Translation Manager V1.0
  - Utilities
    - ExportDefaultText2 - BoTran2 "JumpStart" Export Default text V1.0
- + Groups
  - + Class BRT - BigRegistrationTamer
  - + Class BSEC - Security Access Templates
  - + Class BSMF - EMail File Template

### 4.1 BoTran2Global

Add the BoTran2Global Template to your app and fill in the prompts. BoTran2Global automatically populates the [BoTran2Ext](#) template on all procedures in the app.



**Disable BoTran in this app** if you have compile problems and you Mistakenly suspect BoTran2 as the source of your problems.<g> This will disprove any more notions about that.

If **this is part of a multi-dll app**, check the appropriate boxes. You should only **export Global data** in your root dll.

BoTran2 uses a **Global Queue** for Translation by default, but if you need a smaller memory footprint, Unchecking this box will use direct file access which is blazing fast when stored in the local current directory with the app. BoTran2 is not recommended for use with direct file access across a network.

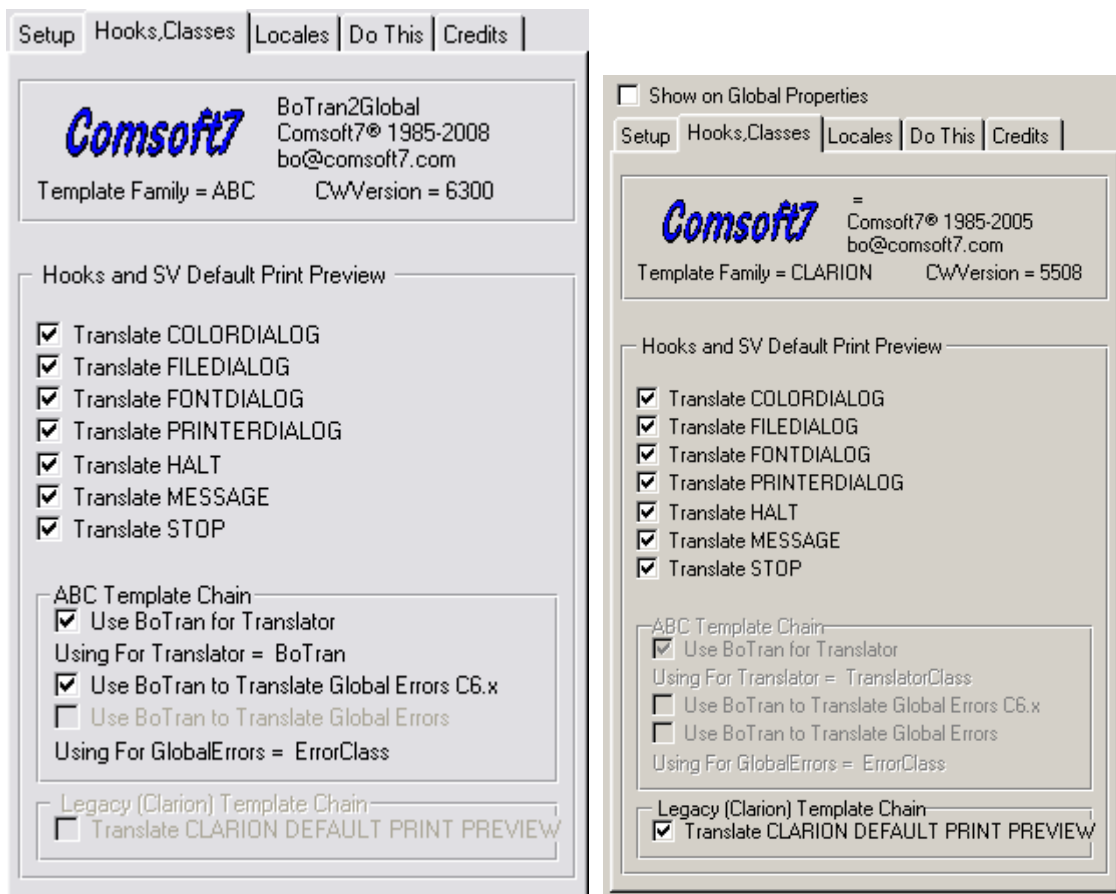
Select a **Translation File** (\*.BTL) to use with the app. Select the same file that you used in the [JumpStart Utility](#) Template for this app. This file name defaults to "%Application.btl". This prompt is only available on the app with EXE extension. It is highly recommended this file reside in a local directory along with the app.

Select an **Ini File for Parameter**. This ini file should reside in the local directory along with the exe and BTL file. It is used by the global template to initialize the language selection, and by the [BoTran2Lang](#) control template to dynamically change languages, and store the newly selected language. You can also alternate your current Language (BTL) file in use if you support more than 28 Languages. Then check the box "[I will control BTL File and](#)

[Lang used](#)" if you want to take over control of the Language files, and use your own ini file or TPS control file. You can also substitute your own procedure or other methods of changing Languages and Language files. The default Language control uses one Language file and supports 27 alternate Languages. If you are using this as a network app, and store the exe and dll's locally along with the BTL files and ini, you can have the apps running in different languages simultaneously.

Errors and updating. It is recommended that you leave **'Do not Display BoTran File Errors'** and **'Do not Update the BoTran File'** checked. 'Do not Update the BoTran File' when unchecked is for using to pick up strings that JumpStart may have missed. If you leave this unchecked and run in a language other than default, it can cause translated strings to be added to your BTL file. This should only be used when developing an app, running it in a test, with a blank extra language picked, so it will add any untranslated strings to the language file. Touch each procedure to cover the possibilities. Jumpstart should be run any time you make text changes in the app, as it only adds new text, and will do no harm.

**Force Early Translation,3rdParty Support** was added due to the fact that many 3rdParty vendors are adding menubars, taskbar's, task panels, and doing other cool things in the the wrong embeds before the window is really open and translated. This checkbox will cure many of those problems by forcing the SV translator to translate the window as early as possible. There is a global switch if you have a lot of problems, and local procedure switches if you only have one or a few problems with this.

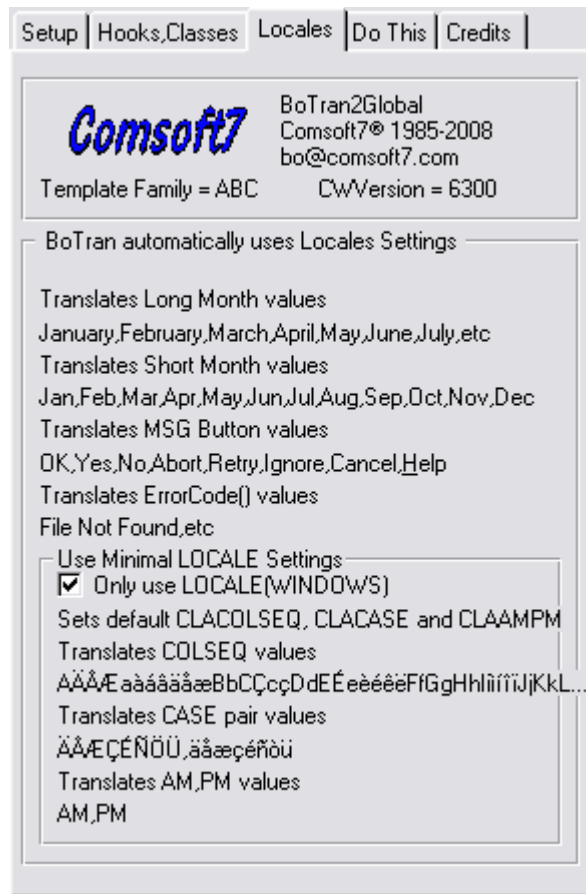


There are [7 hooks](#) provided by BoTran2 to intercept and translate Captions and Texts being sent to the various dialogs and messages. It merely intercepts them, and then sends them back to whatever procedure or default you are using. The hooks are provided "very late in the game" so they can play well with other 3rdParty providers such as MessageBox by Capesoft(tm). Just turn off the ENV stuff in MessageBox and let BoTran2 handle that<g>.

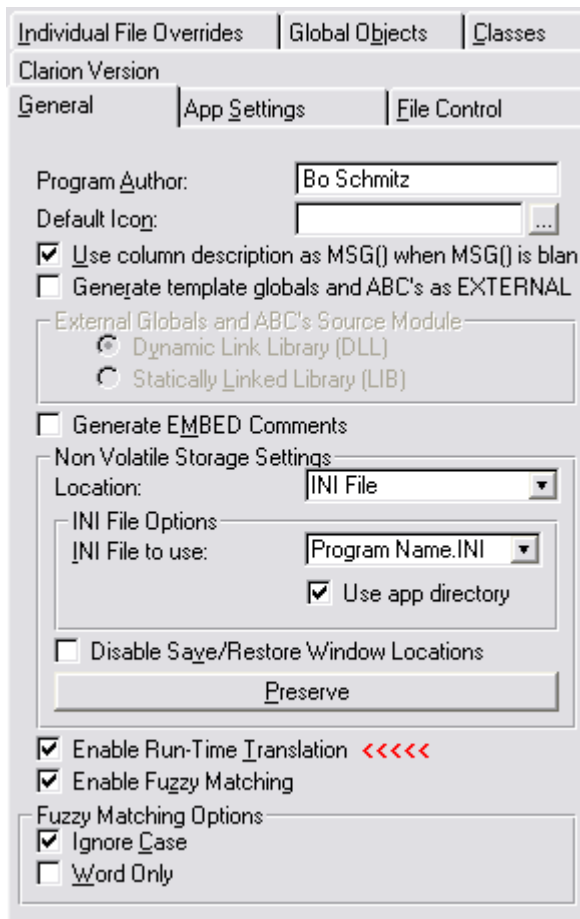
ABC Template Chain.

Check the box if you are using BoTran2 Class for the Translator. Check the box if you want BoTran2 to Translate the Global Errors. These checkboxes automatically substitute the BoTran2 Classes for the Defaults as needed. This is only available for the [ABC](#) Chain.

**Translate Print Preview** will use a modified Translated version of the Default Print Previewer supplied by the templates instead of the default one. It uses one that is part of the BoTran2 Class. It is only available in the [Clarion](#) Legacy Chain.



BoTran2 Locale replaces the messy ENV files, etc used by the System. They basically translate the system variables use by the app and are pretty much self-explanatory. See Under the Hood [Locale ENV Support](#) for more info. Sometimes you can use the Checkbox **Only use LOCALE(WINDOWS)** to use the endusers Window ENV to work properly.



Make sure you Enable Run-Time Translation in the Global templates.

#### 4.1.1 BTL File Control

If you check the box to "**I will control BTL File and Lang used**" then you will be responsible to load the proper Language file used (\*.BTL) and Language selected within the file (1-10) You can do this thru your own procedures and store in an ini file or control file, however you wish.

BoTran2 uses a Global Variable for the Language Selected (**G:BTLang**) and Language file Selected.(**G:BTFile**)

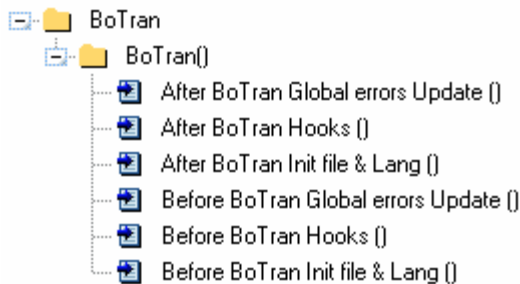
You then must properly prime these two variables in the app, or each app of a multi-dll program with the proper values in the [Global Embed point : Before BoTran2 Init](#)

BoTran2 init uses these 2 variables to load the correct file and language on initializing each app in Single Exe or in multi-DLL programs.

If this is a multi-DLL then you must prime them in each app that is part of the Program.

You will need to modify the existing Language Change control, or develop your own to store the file names and language numbers you use for your control of these variables.

## 4.1.2 Embeds



This global embed is provided in case you are controlling the Files yourself, or need more than 10 Languages supported. It occurs right after the Translation default file name is loaded into the Global variable, and the ini file is read and the default Language is loaded into the Global variable.

A Global variable is used for the Language selected.

G:BTLang          BYTE(1)          ! Values 1-10

### CLARION Legacy Generated Source code with embeds

```
G:BTLang = GETINI('BoTranLang','UseLanguage',1,'.\BoTran.INI')
Translator.BTInit('mainexe.btl',G:BTLang,'mainexe.bts',1,1) !BoTran.init
! parms (BoTran file, BoTran Lang, BTSub file, Queue Flag, Silence Flag)
Translator.UseQueue = 1
Translator.Silence = 1
Translator.NoFileUpdate = 1
!Translator.StopTranslate = False
! Embed Point of BoTran After Init Class To setup Tran File & Language.****
! Embed Point Before BoTran Hooks
Translator.InitHook(1,ADDRESS(BoTranColorDialog))
Translator.InitHook(2,ADDRESS(BoTranFileDialog))
Translator.InitHook(3,ADDRESS(BoTranFontDialog))
Translator.InitHook(4,ADDRESS(BoTranPrinterDialog))
Translator.InitHook(5,ADDRESS(BoTranHalt))
Translator.InitHook(6,ADDRESS(BoTranMessage))
Translator.InitHook(7,ADDRESS(BoTranStop))
! Embed Point After BoTran Hooks
SystemParametersInfo (38, 0, 1CurrentFDSetting, 0)
```

ABC Generated Source code with embeds.

```

G:BTLang           BYTE(1)
Access:people    &FileManager
Relate:people    &RelationManager
Translator       BoTran
FuzzyMatcher     FuzzyClass
GlobalErrors    BoTranErrC
INIMgr           INIClass
GlobalRequest    BYTE(0),THREAD
GlobalResponse  BYTE(0),THREAD
UCRRrequest     LONG(0),THREAD
lCurrentFDSetting LONG
lAdjFDSetting   LONG

```

```

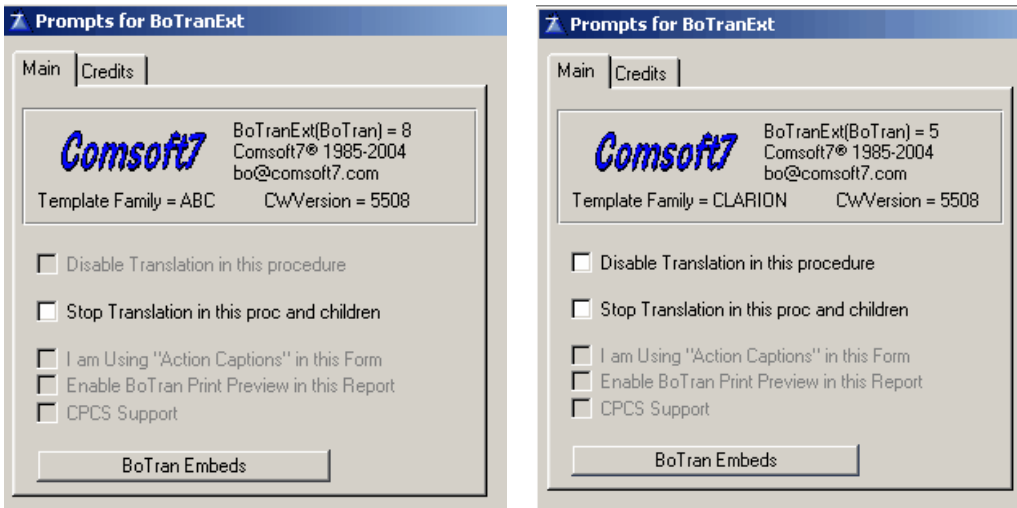
CODE
GlobalErrors.Init
DctInit
Translator.Init
FuzzyMatcher.Init
FuzzyMatcher.SetOption(MatchOption:NoCase, 1)
FuzzyMatcher.SetOption(MatchOption:WordOnly, 0)
INIMgr.Init('people.INI')
! Embed Point Before BoTran Init Class To setup Tran File & Language.*****
G:BTLang = GETINI('BoTranLang','UseLanguage',1,'.\BoTran.INI')
Translator.BTInit('People.btl',G:BTLang,'People.bts',1,1) !BoTran.init
! params (BoTran file, BoTran Lang, BTSub file, Queue Flag, Silence Flag)
Translator.UseQueue = 1
Translator.Silence = 1
Translator.NoFileUpdate = 1
Translator.ExtractText=''
!Translator.StopTranslate = False
! Embed Point of BoTran After Init Class To setup Tran File & Language.*****
! Embed Point Before BoTran Hooks
Translator.InitHook(1,ADDRESS(BoTranColorDialog))
Translator.InitHook(2,ADDRESS(BoTranFileDialog))
Translator.InitHook(3,ADDRESS(BoTranFontDialog))
Translator.InitHook(4,ADDRESS(BoTranPrinterDialog))
Translator.InitHook(5,ADDRESS(BoTranHalt))
Translator.InitHook(6,ADDRESS(BoTranMessage))
Translator.InitHook(7,ADDRESS(BoTranStop))
! Embed Point After BoTran Hooks
SystemParametersInfo (38, 0, lCurrentFDSetting, 0)
IF lCurrentFDSetting = 1
    SystemParametersInfo (37, 0, lAdjFDSetting, 3)
END
.. .

```

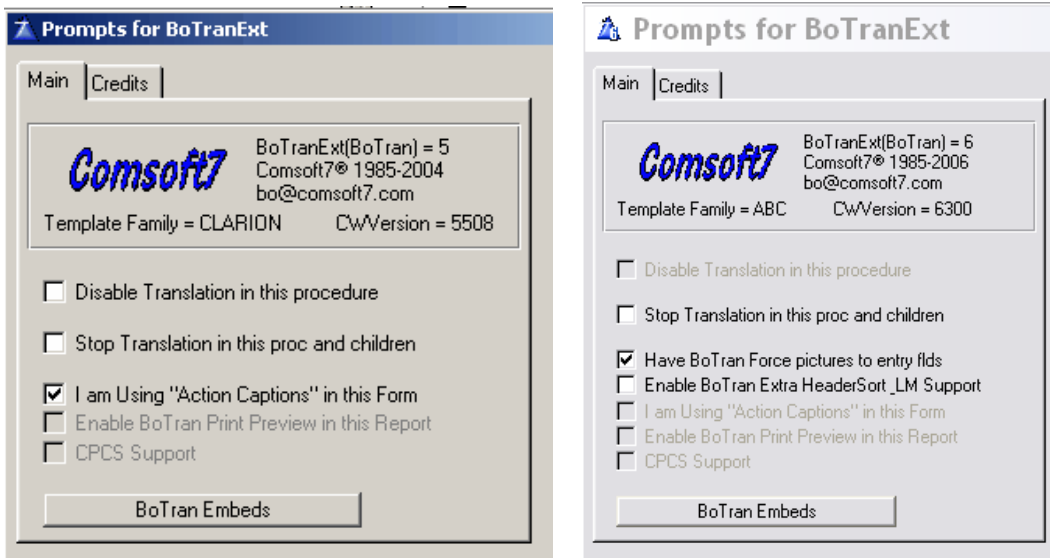
## 4.2 BoTran2Ext

The BoTran2Ext template is automatically populated on each procedure by the [BoTran2Global](#) template.

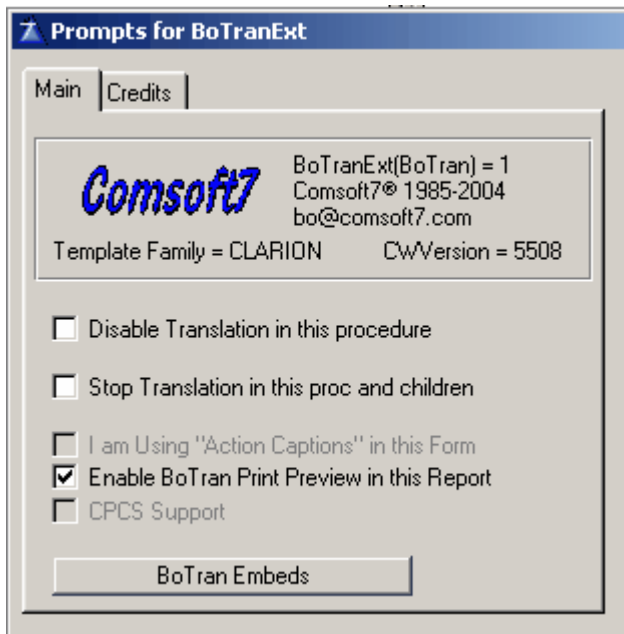
Template prompts will be enabled and disabled according to the version of Clarion, Clarion Chain, and type of procedure that is being used.



When the template appears on the Frame, Browse, Window, or process, there are no prompts to fill in other than if you need to disable the Translation in this procedure for some reason. One reason is that you may be changing some text properties of some controls manually, or in setup, and want to add the [BoTran2Special](#) code template and Translate the window when you are done.



When populated on a Form, the **'I am Using "Action Captions" in this Form'** checkbox becomes enabled, and does a late translation on the window caption if you check the box. **'Have BoTran2 Force pictures to entry flds'** was added to correct a bug in C6 that would lose the picture format of entry fields when trying to translate the entry form. It defaults to ON. **'Enable BoTran2 Extra HeaderSort & LM Support'** was added to translate the List Manager in C6.



If the procedure is a report, the '**Enable BoTran2 Print Preview in this Report**' checkbox becomes active, and if you check it, it will use a translated version of the default Clarion Previewer. This feature has to be enabled in the Global template to be available here. This is only available in the Legacy Chain.

If the procedure is a CPCS UnivReport Procedure, the 'CPCS Support' checkbox becomes active, and if checked, will translate 27 variables used by the [CPCS Previewer](#).

BoTran2 [Embeds](#) Button.

#### 4.2.1 Embeds



Embed points are provided both before and after the "progress window" and "report" itself are translated. This gives you the opportunity to do any changes to the prop:text values before translation.

## Legacy chain

```
! Start of "BoTran"  
! [Priority 5000]
```

```
! End of "BoTran"  
IF Translator.Entry2Text  
END |  
Translator.BTwin  
! Start of "BoTran"  
! [Priority 5000]
```

```
! End of "BoTran"
```

```
! Start of "BoTran"  
! [Priority 5000]
```

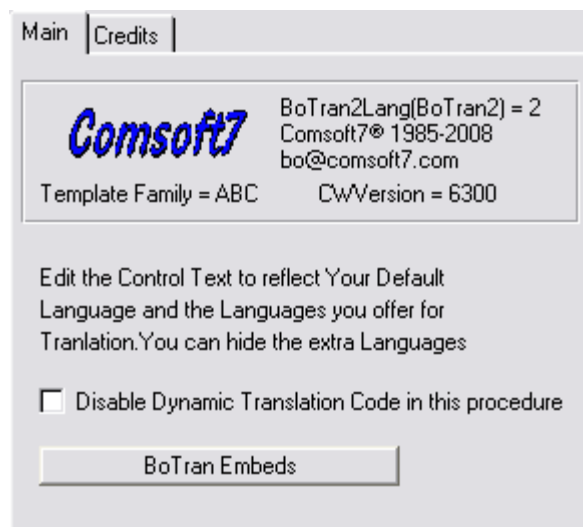
```
! End of "BoTran"  
Translator.BTwin(Report)  
! Start of "BoTran"  
! [Priority 5000]
```

```
! End of "BoTran"
```

## ABC Chain:

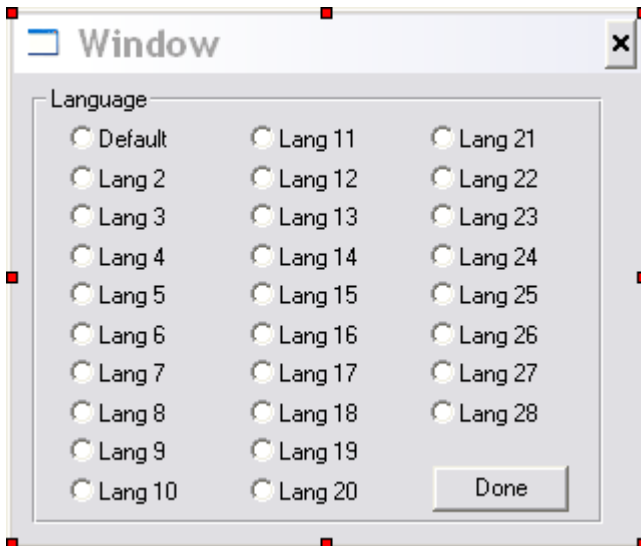
Has the Embeds for Windows, but not reports.  
Embed wraps any Entry to text calls.  
It is built in the ABC chain.

## 4.3 BoTran2Lang

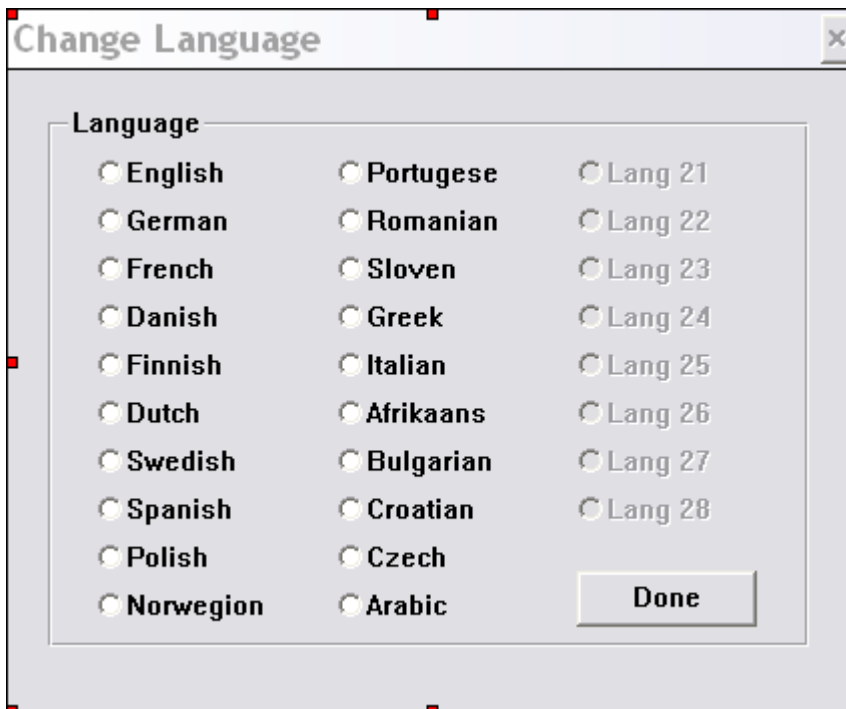


It is **highly recommended** that the BoTran2Lang Control be dropped on a generic window

running directly off the main frame of the Main EXE procedure. This guarantees proper operation that may be affected across dll's.



BoTran2Lang Control as dropped



Modified in IDE

Please note that you can modify the text in the Radio's to reflect the languages stored in the BTL file. You can hide or delete the extra Radio's that you do not need.



Modified control at runtime being Translated.

Please note that when you change languages at runtime, a window will not be translated until the next time you open it. Any open windows will remain untranslated, as they have already been translated when they were opened. That goes for the currently opened "Language Change procedure" as well. The only exception is the frame, which will be automatically translated when a new language is selected.

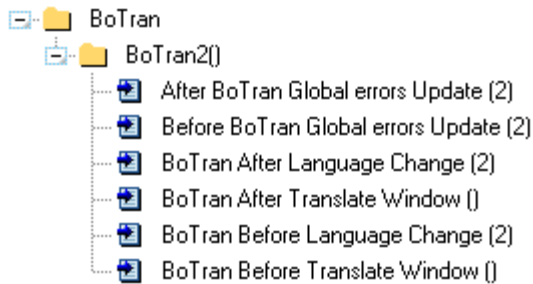
Changing Languages is dynamic, so as soon as the radio is selected

1. The Global variable is changed to the new language
2. The Language is stored in the ini file
3. BoTran2 Class switches Languages in the file, and the Global queue is reloaded with the new language if you are using the queue based class.
4. Then the Main Frame is translated back to default and translated to new language.
5. Then any Locale stuff selected in the Global templates is done.
6. In ABC the Global Errors will be updated to new language.

You can see this in the [embeds](#) when viewed as source.

### 4.3.1 Embeds

The Before and After Global Errors embeds only appear in ABC app.



Language Change embeds. ABC

```
! Start of "BoTran"
! [Priority 5000]
```

```
! End of "BoTran"
G:BTLang = Language
PUTINI('BoTranLang','UseLanguage',G:BTLang,'.\BoTran.INI')
! Embed Point Before BoTran Global errors Update.****
! Start of "BoTran"
! [Priority 5000]
```

```
! End of "BoTran"
DO BoTranRemoveErrors
Translator.BTDLC('People.btl',G:BTLang)
DO BoTranLocale !****
DO BoTranAddErrors
! Embed Point After BoTran Global errors Update.****
! Start of "BoTran"
! [Priority 5000]
```

```
! End of "BoTran"
! Start of "BoTran"
! [Priority 5000]
```

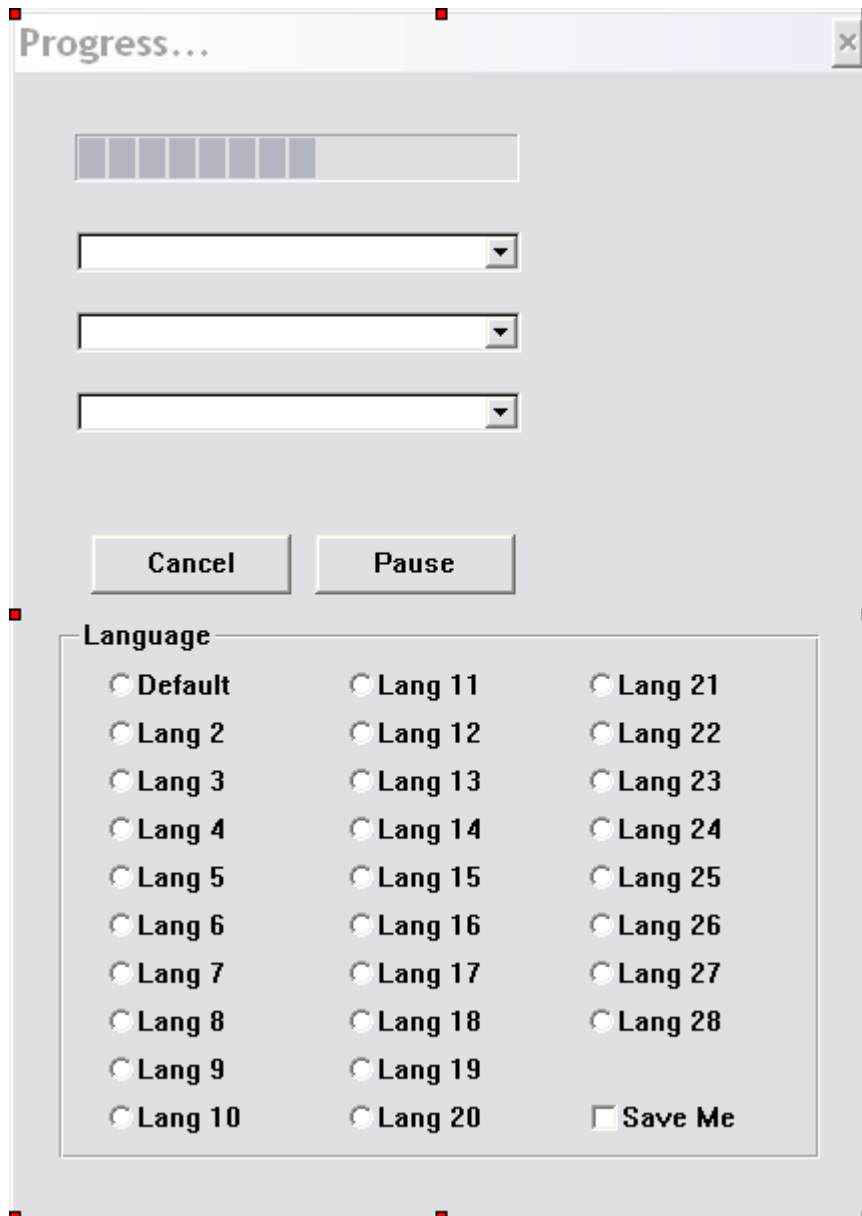
```
! End of "BoTran"
LanguageOld = G:BTLang
! [Priority 4700]
```

## 4.4 BoTran2ReportLang

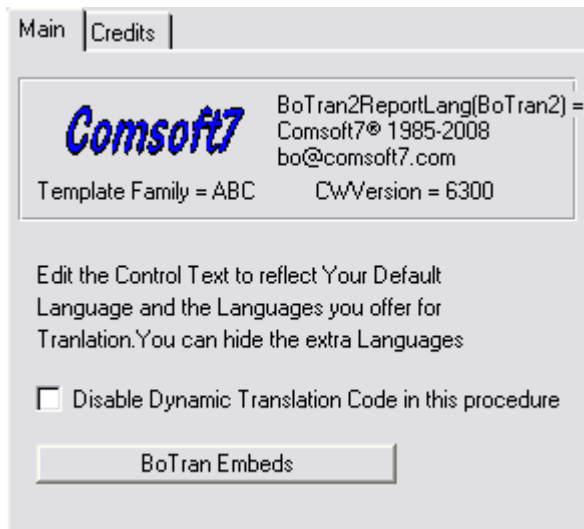
You will want to use the BoTran2ReportLang template with a pause control.

Here is an example of the control dropped in below a wizard generated report using all keys. Reposition as you see fit.<g> Put your languages into the radio fields.

The Save Me checkbox will save the language choice to an ini file, and automatically preselect that language the next time the report is run.



The template prompt only has one checkbox to disable the template if you suspect problems.



Here is a screen shot of the control at runtime with a standard pause control.

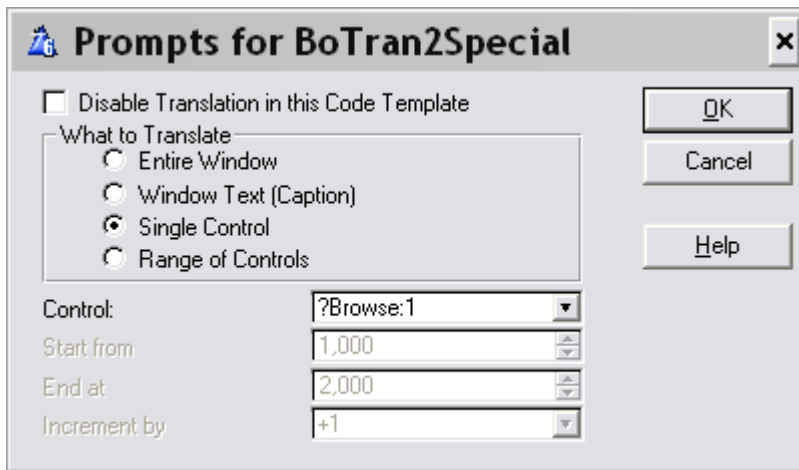


## 4.5 BoTran2Special Code

**BoTran2Special** is a **Code** template for doing any miscellaneous translating jobs you may find laying around<g>.

Example 1, some add on browse header sort templates will change the browse back to default text when applied. In this case you add the code template after the browse is sorted, and translate the browse.

Example 2, you add a 3rd party or other procedure that does not have "ABC translator" calls built in, then add the Translate Entire window code template to the procedure after the window is opened.



## What to translate

1. **Entire Window** will translate all controls in the window including menu's and toolbar's. Use this along with "disable in this procedure" checkbox in the BoTran2Ext template if you are manipulating prop:text, and strings and captions, and want to wait until they are all done to do the translation of the window. **CAUTION:** If you let the BoTran2Ext Translate the window and use this selection, BoTran2 will add all kinds of "Translated Text " to the BTL file, because they do not appear in the default language field of the BTL file. (If you have that turned on in the Global Template) Remember, BoTran2 always works with the "Default" text, and substitutes another language string when it exists.
2. **Window Text(Caption)** will just translate the Window text after you change it in an embed. `0{PROP:TEXT} = Translator.BTStr(0{PROP:TEXT})` If you conditionally change text in an embed and then use this code template, see example below, so BoTran2 has some default text to translate<g>
3. **Single Control** will just translate one control if you have Changed the text on it.  
**Control** = select the control to translate.
4. **Range of Controls** Use this option if you or a 3rdParty template have created a range of controls at runtime that need translating. Remember they need use variables(numbers) to be translated.  
**Start From** lowest created control  
**End at** highest created control(or higher, it is very forgiving<g>)  
**Increment by** +1 or -1 depending on Order.

**Basic How it works:** BoTran2 takes the "Default text" , or date format, or picture, for a

control, ToolTip, Message, Browse Header, "whatever" and looks it up in a queue or file in the "default language" portion. If a translation exists in the "chosen language", BoTran2 replaces the default string with the replacement string. If BoTran2 does not find the "default text" in the queue or file, BoTran2 will add it to the File and the queue (if you have that feature enabled). This is why you should not "Translate" already "Translated" text, as it will start adding them all to the BTL file as Default Text strings.

BoTran2 always does a **CLIP(LEFT('MyText'))** so it ignores extra blank spaces.

BoTran2 is **not Case sensitive**, so File = file = fiLe = fileE, etc.

**But** &File <> File <> File: and all are separate entries in "default text"

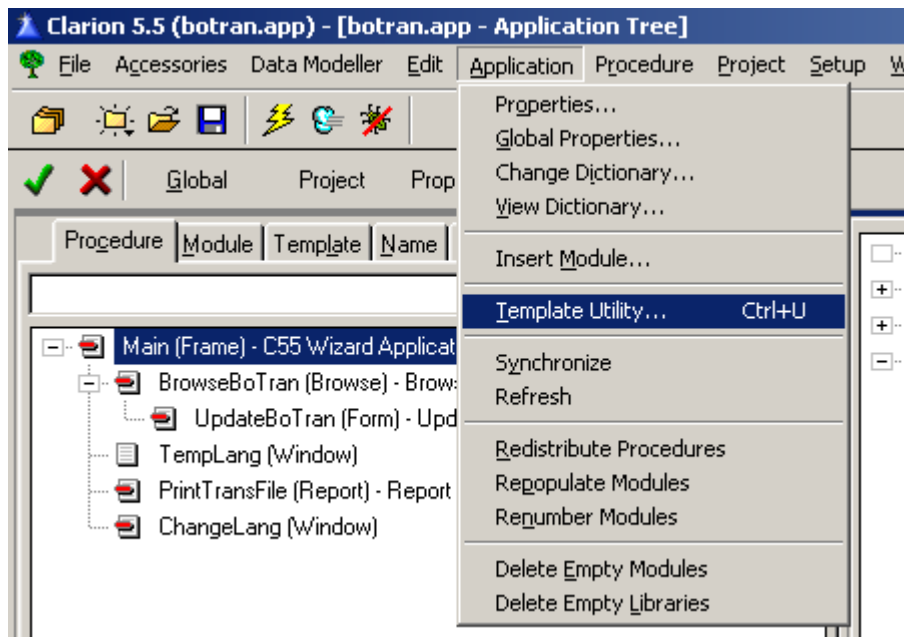
When using BoTran2 always do conditional assignment of text this way, so we always have default text to translate.

This example shows hand code to translate the text calling the BTStr method.

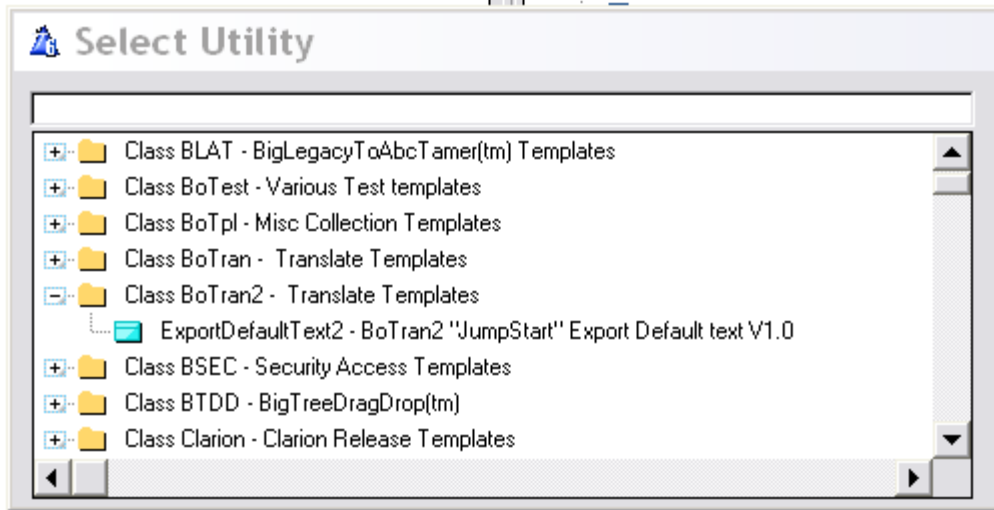
```
IF MyVariable = 3
  ?MyButton{PROP:TEXT} = ' Doctor'
ELSE
  ?MyButton{PROP:TEXT} = ' Nurse'
END
?MyButton{PROP:TEXT} = Translator.BTStr(?MyButton{PROP:TEXT})
```

## 4.6 ExportDefaultText2

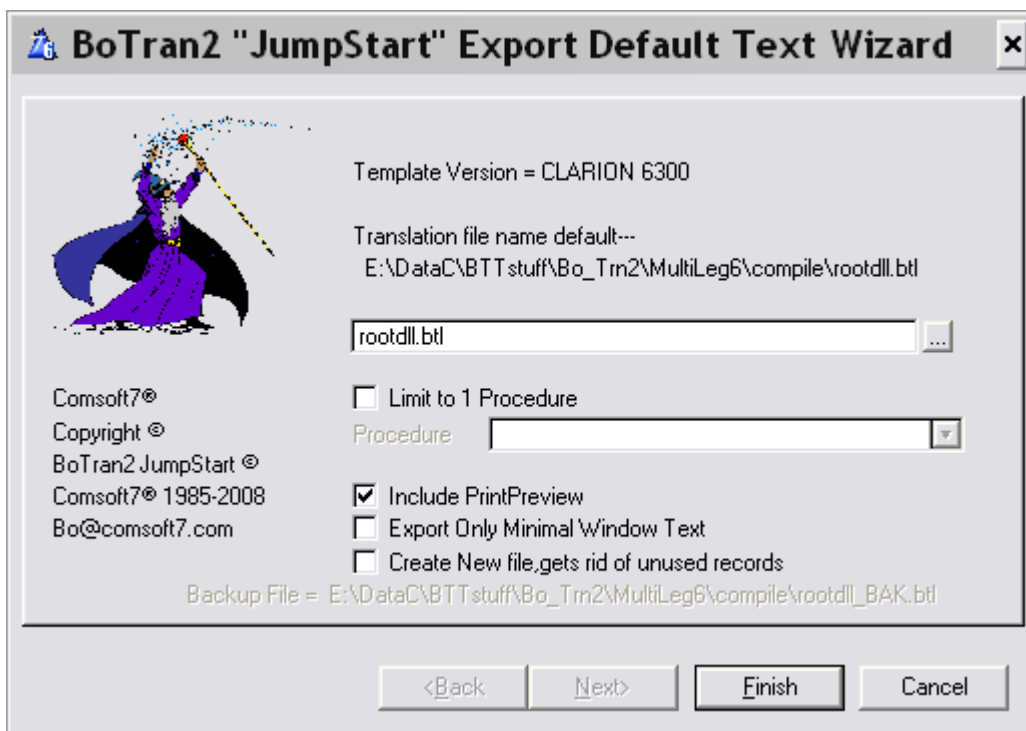
**ExportDefaultText** is a JumpStart **Utility Template** that puts at least 98% or more of the default text in the BTL Translation File for BoTran2 to use at runtime.



Access thru Application\Template Utility or with Ctrl+U



Select the ExportDefaultText2 BoTran2 JumpStart Utility.



Use the default name supplied by the template "%Application.BTL" or choose your own. If you are using **multi-dll apps**, then remember to run the JumpStart utility on each app, and always point it at the **same BTL file**<g>.

This gathers all the text from the app, window titles, prompts, etc, plus adds the errors and dialogs, etc if you select that option. BoTran2 then creates the file if it doesn't exist, or appends the default text if it already exists. The BTL file is not case sensitive, so each entry is unique, no duplicates will be saved. BoTran2 always does a CLIP(LEFT('MyText')) so it

ignores extra blank spaces.

You can run BoTran2 Jumpstart as often as you make changes to text in your app, and it only adds any new strings it finds. It will not harm any existing strings in your language files.

Options have been added to **Limit to 1 procedure**, and **Export only minimal Window text** if those are the only changes you made, or want to translate, etc.

**Create New file, gets rid of unused records** checkbox was added by request to get rid of unused older records. Will backup old file to displayed name, and create new file with current strings. Use [EdBoTranM](#) to put the translations back into the new file.

BoTran2 also creates a matching "%Application.bts" substitution file that eliminates the needs for all those darn TRN and ENV files.<vbg>

## 4.7 ExportEmbedText

The [ExportDefaultText2](#) utility template gathers all the texts and pictures declared in the main app, but cannot find texts used by the developer in the embeds.

ExportEmbedText is designed to loop thru your embedded text and find messages, tips, texts, etc and add them to the BTL file for translating at runtime.

Caveats:

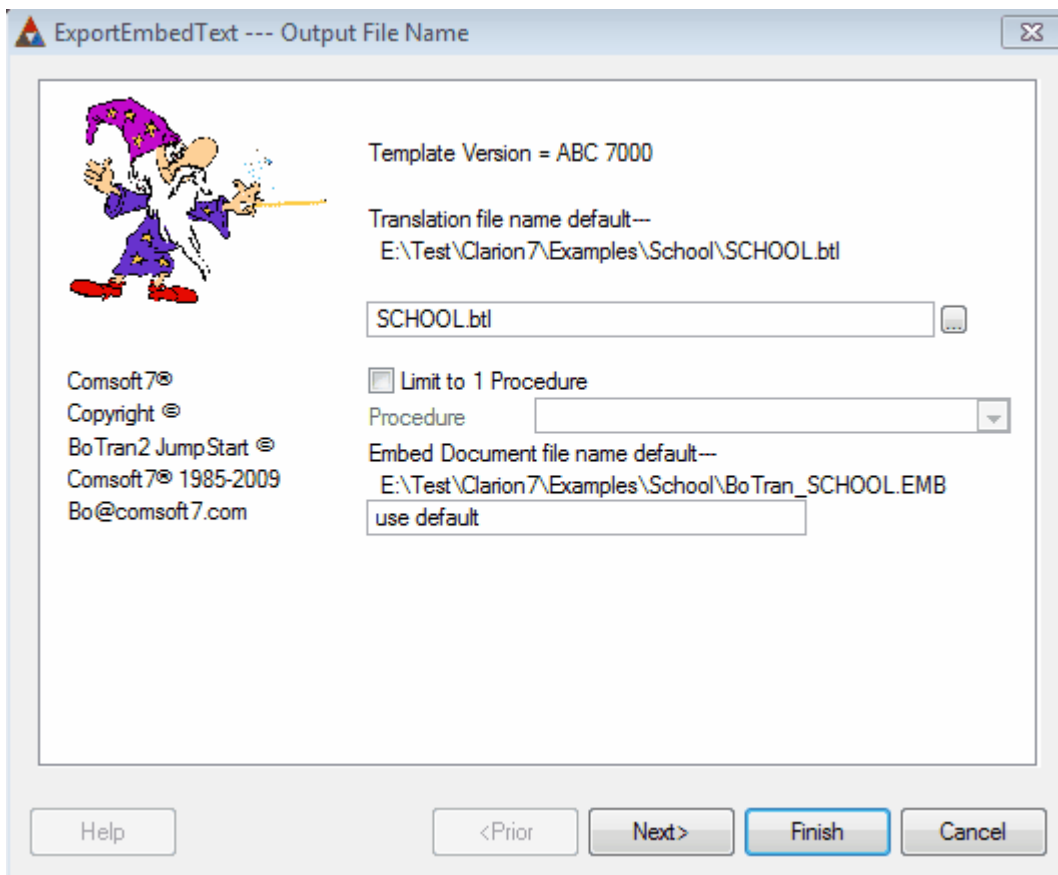
Wizard does not ignore commented out text.

Cannot detect multi-line messages, tips, etc.

Wizard will catch the first line of them.

They must be properly formatted to find them. ie: " message(' " - no extra spaces.

Access thru Application\Template Utility or with Ctrl+U



Unless you want to limit it to one procedure or several procedures, just accept the defaults and press "Finish".

You can run BoTran2 Jumpstart as often as you make changes to text in your app, and it only adds any new strings it finds. It will not harm any existing strings in your language files.

## 5 Language File

You can view the file with TopScan, repair it, pull it into the dictionary, but don't change any fields or keys in it or it will be unusable by the BoTran2 classes.

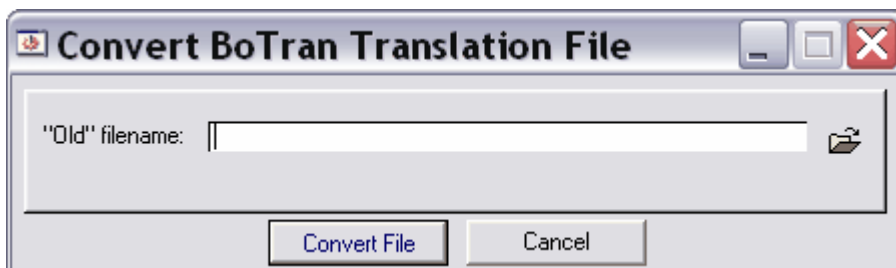
Some developers even have a procedure where the enduser can update the translations for local compatibility and clarity.

```
BoTranF
FILE,DRIVER('TOPSPEED'),NAME(BoTranFilename),PRE(BOT),CREATE,BINDABLE
Key_DefLang    KEY(BOT:DefLang),NOCASE,PRIMARY
Record         RECORD,PRE()
DefLang        STRING(512)
SrcOfText      CSTRING(512)
Lang2          CSTRING(512)
```

```
Lang3      CSTRING(512)
Lang4      CSTRING(512)
Lang5      CSTRING(512)
Lang6      CSTRING(512)
Lang7      CSTRING(512)
Lang8      CSTRING(512)
Lang9      CSTRING(512)
Lang10     CSTRING(512)
Lang11     CSTRING(512)
Lang12     CSTRING(512)
Lang13     CSTRING(512)
Lang14     CSTRING(512)
Lang15     CSTRING(512)
Lang16     CSTRING(512)
Lang17     CSTRING(512)
Lang18     CSTRING(512)
Lang19     CSTRING(512)
Lang20     CSTRING(512)
Lang21     CSTRING(512)
Lang22     CSTRING(512)
Lang23     CSTRING(512)
Lang24     CSTRING(512)
Lang25     CSTRING(512)
Lang26     CSTRING(512)
Lang27     CSTRING(512)
Lang28     CSTRING(512)
          END
          END
```

## 5.1 ConvBTL Utility

Convert your existing BTL Language file with provided Utility ConvBTL.exe.



Will convert old 10 Language File into new 28 Language BTL file.  
Load the Old Filename, and hit the Convert File button.

## 5.2 ReadTrn2.exe

ReadTrn2.exe is a utility provided with BoTran2 templates to read the temp files created by the JumpStart Utility and create the BTL Language translation files and BTS substitution ENV files used by BoTran2. Most of the default text is gathered from the app, and passed into the BTL file so you can start editing right away.

ReadTrn2.exe is placed in the %ROOT%\bin directory.

Source app and dct for ReadTrn2.exe is placed in %ROOT%\3rdParty\examples\Comsoft7\BoTran2\Source directory.

If English is not your default language, you may have to change the Environment settings for ReadTrn.exe to properly read your default text strings into the language files. This is not much of a problem anymore, because the BoTran2 Upper methods have changed to minimize the LOCALE impact on it.

In the embed

```
#AT(%WindowManagerMethodCodeSection,'Init','),BYTE'),PRIORITY(7800)
```

Currently contains

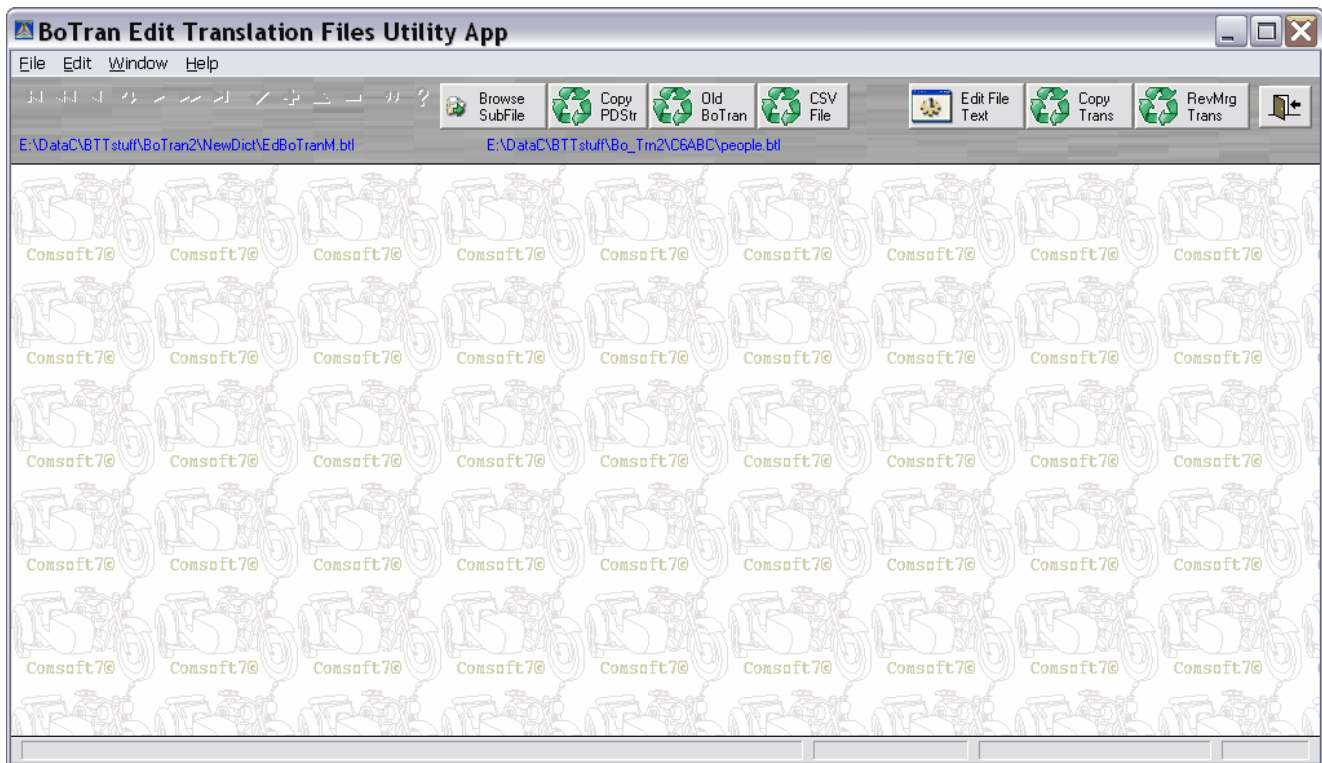
```
LOCALE('WINDOWS') !Set default CLACOLSEQ, CLACASE and CLAAMP ! 6/11/05
```

## 5.3 EdBoTranM Utility

EdBoTranM.exe is a utility app shipped with BoTran2 to edit the BTL translation file.

EdBoTranM.exe along with the app and dct. is located in:  
%ROOT%\3rdParty\examples\Comsoft7\BoTran2\Editor directory.

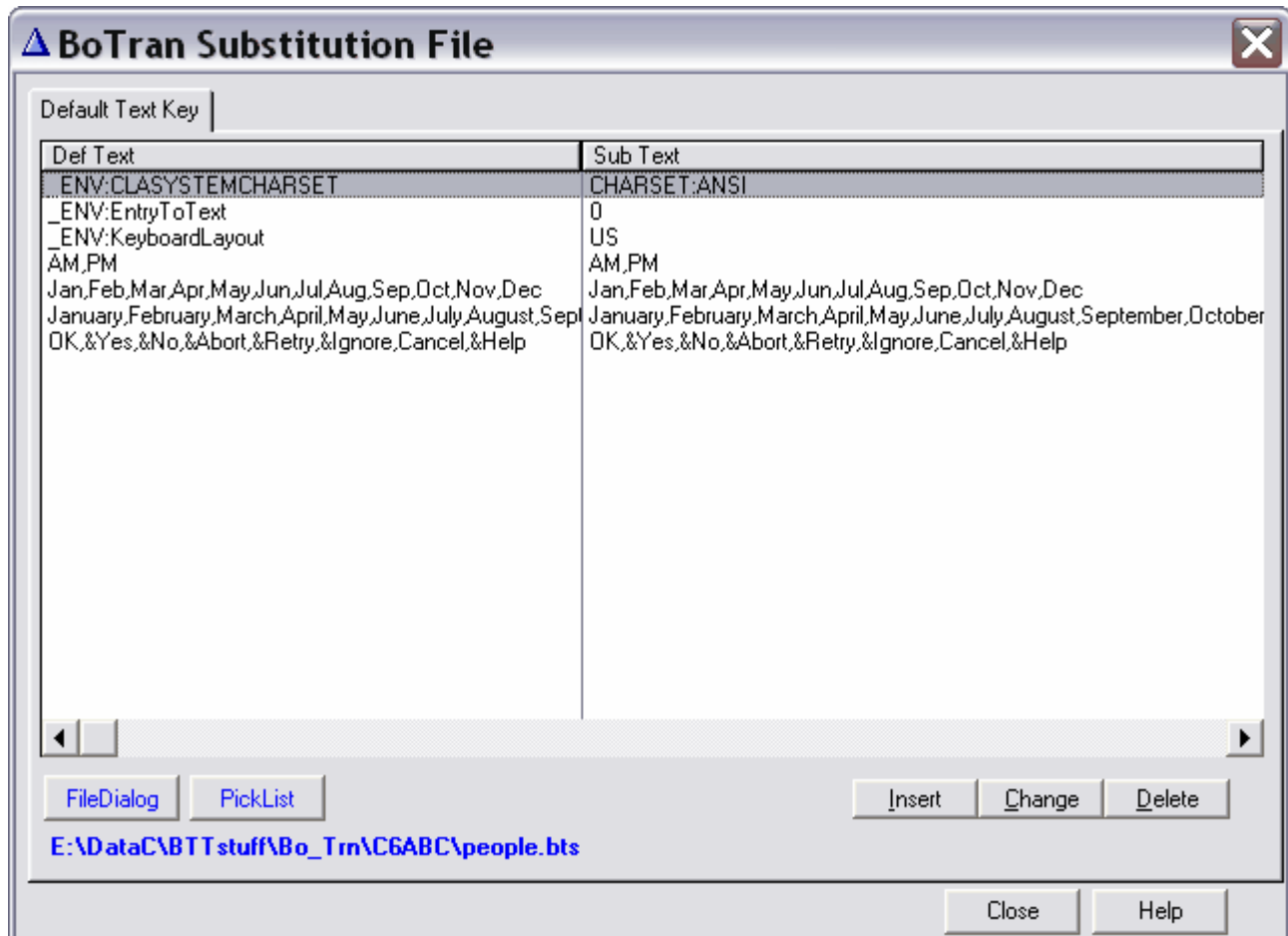
All Source is provided so you can modify to suit your needs, and salt to taste.



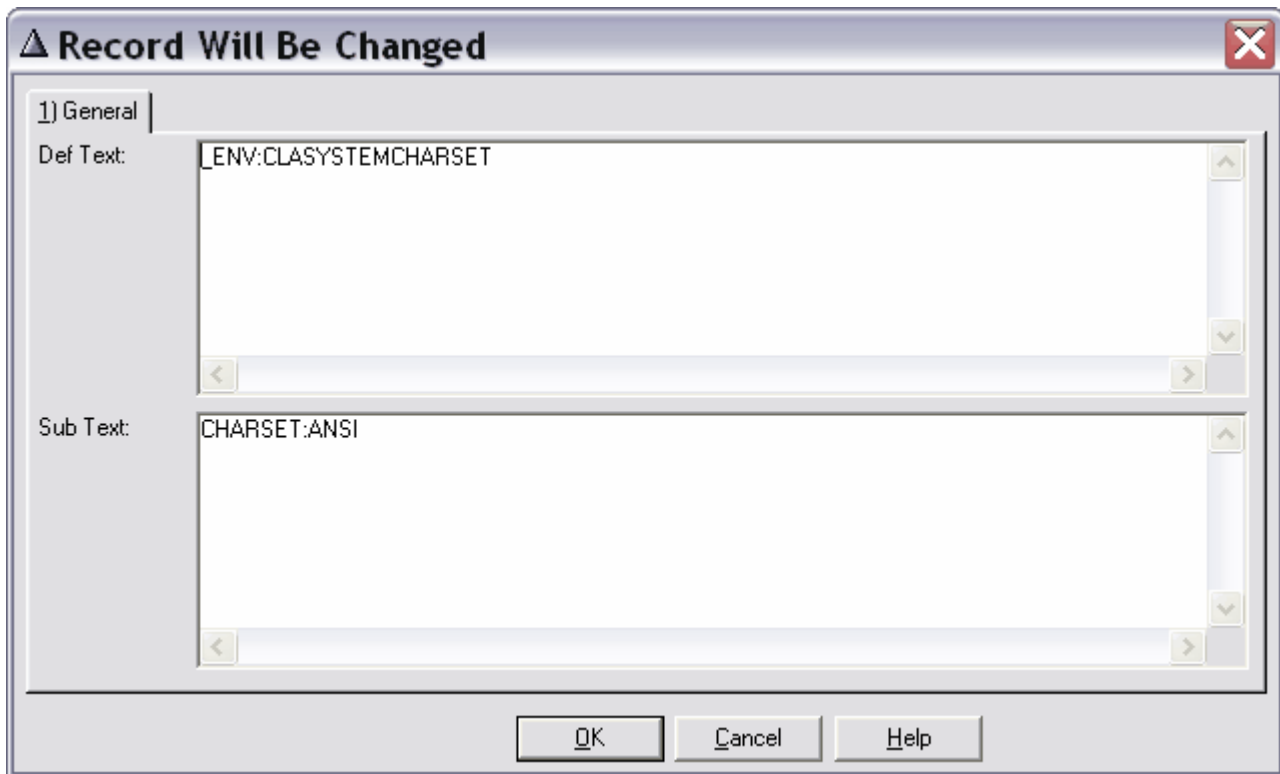
[Browse SubFile](#)  
[Copy PdStr](#)  
[Old BoTran](#)  
[CSV File](#)

[Edit File Text](#)  
[Copy Trans](#)  
[RevMrg Trans](#)

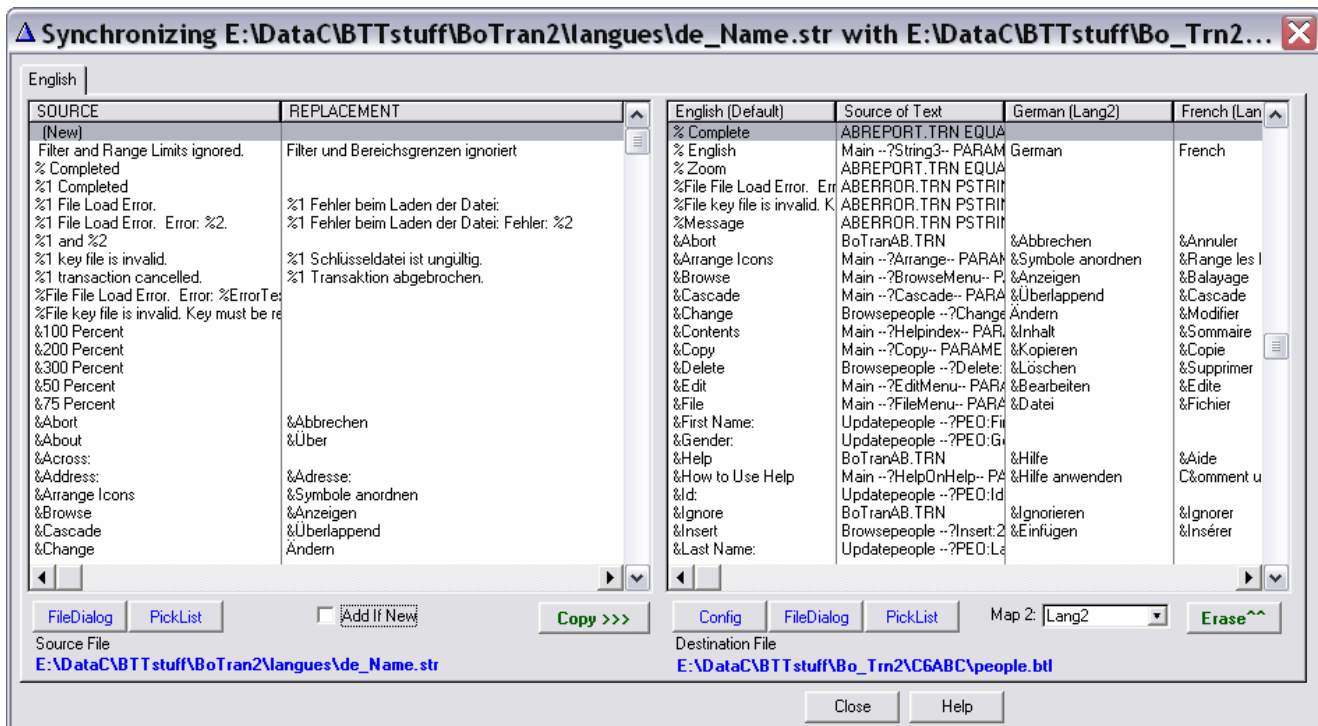
### 5.3.1 Browse SubFile



Allows you to inspect entries and change them in the Default Environmental Substitution file (BTS)



### 5.3.2 Copy PdStr



This procedure allows you to add entries from any existing PD String files used for other 3rd Party Translation providers.

You must **Map 2** a field in the destination file to receive the text from the string file. The **copy>>>** button will transfer translations to the destination file. It will only copy translations for existing text in the destination file, unless you have checked the **Add If New** checkbox. Then it will add new translations and default words to the destination file. This is useful for building Master files for creating other app translation files.

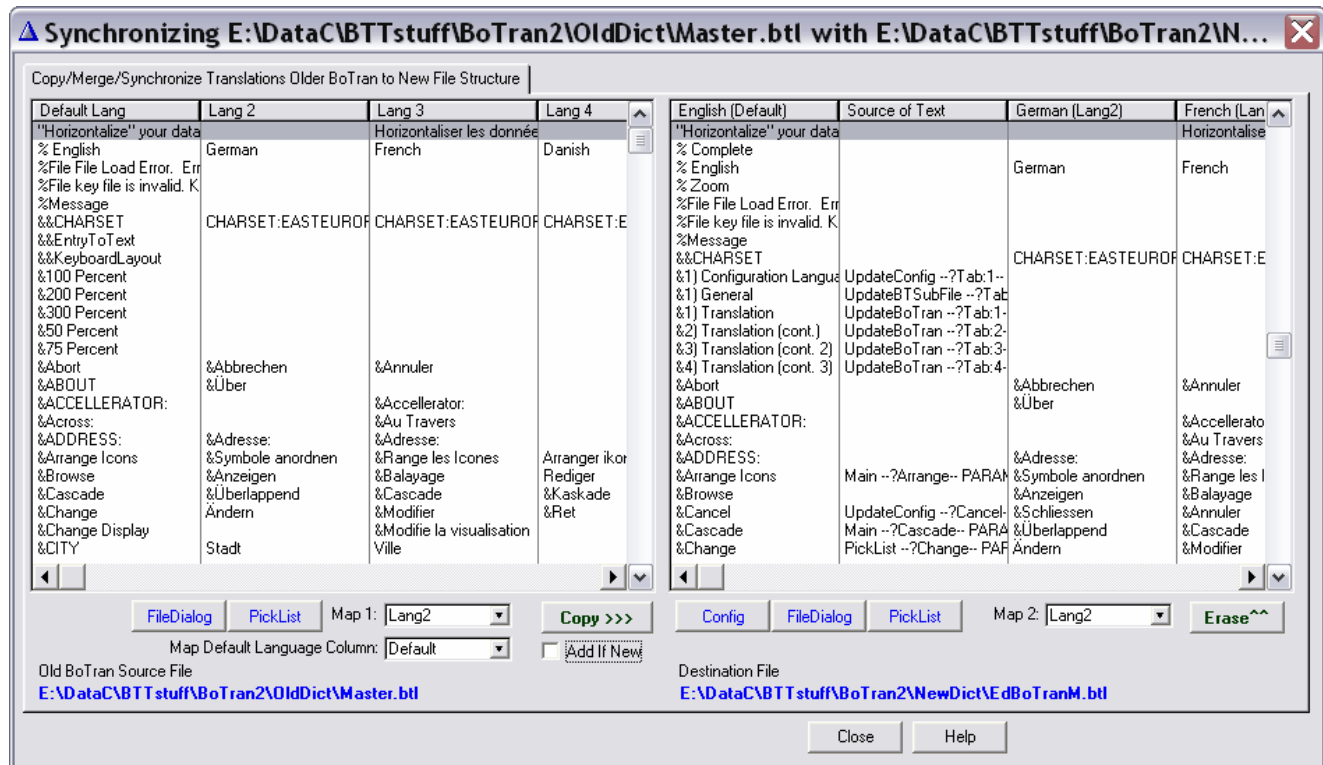
The **Erase^^** button will delete all entries in the mapped column for maintenance reasons.

A FileDialog is provided to pick a New Destination BTL file to edit.

A **Config** Button is provided to call a procedure to Configure the Headers and form prompts for the BTL file in current use.

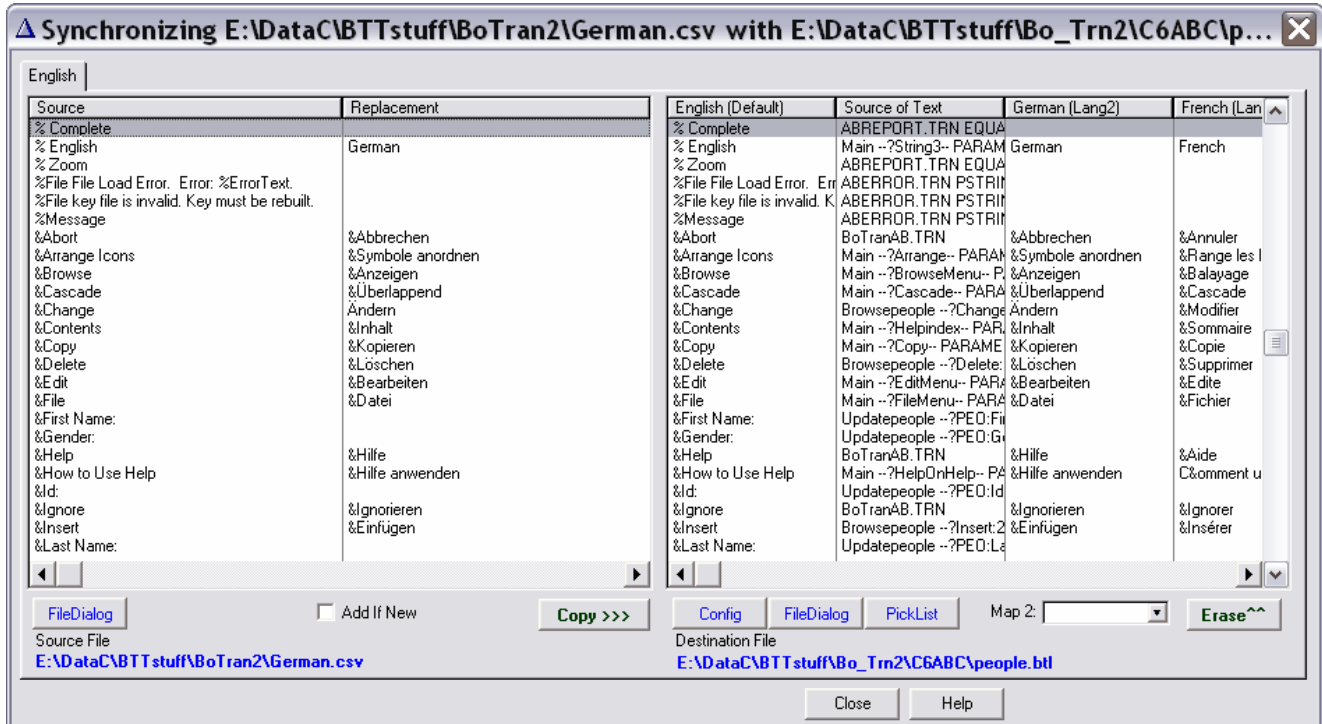
A **PickList** Button is provided to Call a procedure to get a previous BTL file to Edit.

### 5.3.3 Old BoTran



The Old BoTran procedure has been added to take translations from old BoTran 10 language files and add them to the new 28 Language files. Make sure you have a valid old file, or you will get an error 47 and the app will close.

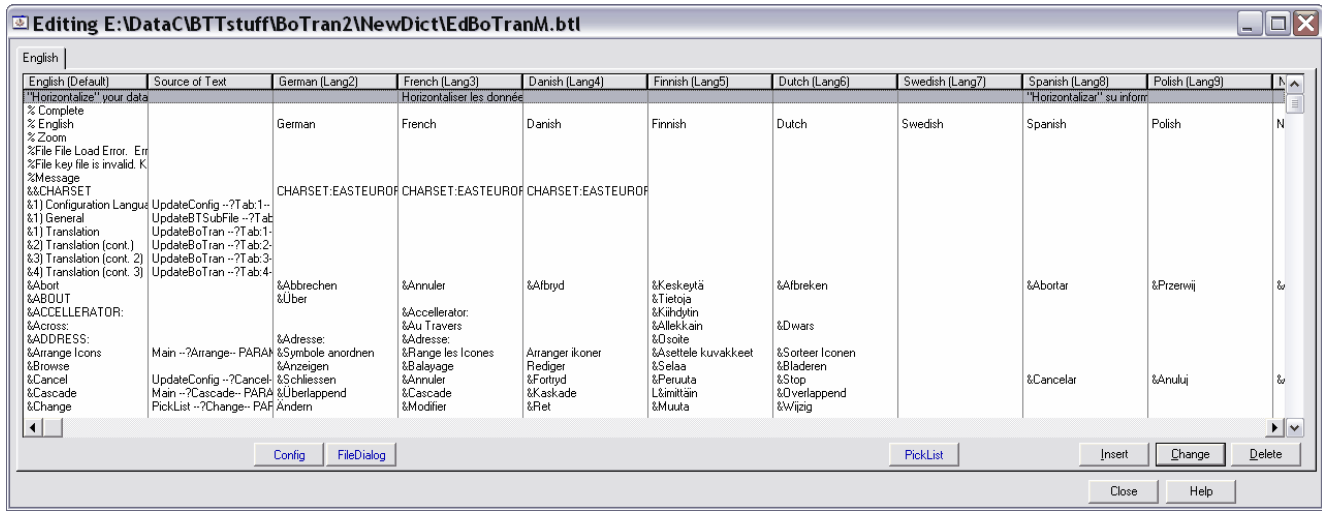
### 5.3.4 CSV File



A new procedure has been provided to import CSV files with translations into BoTran2. Load the CSV file with the File Dialog button, Map it to the Language file with the Map 2 Drop List and press the Copy>>> button. EdBoTranM will replace strings in the Language file's mapped field with any replacement translations in the CSV file for the source text. It ignores strings with empty replacements.

See [Copy Trans](#) for exporting the CSV file for providing translations.

### 5.3.5 Edit File



A FileDialog is provided to pick a new BTL file to edit.

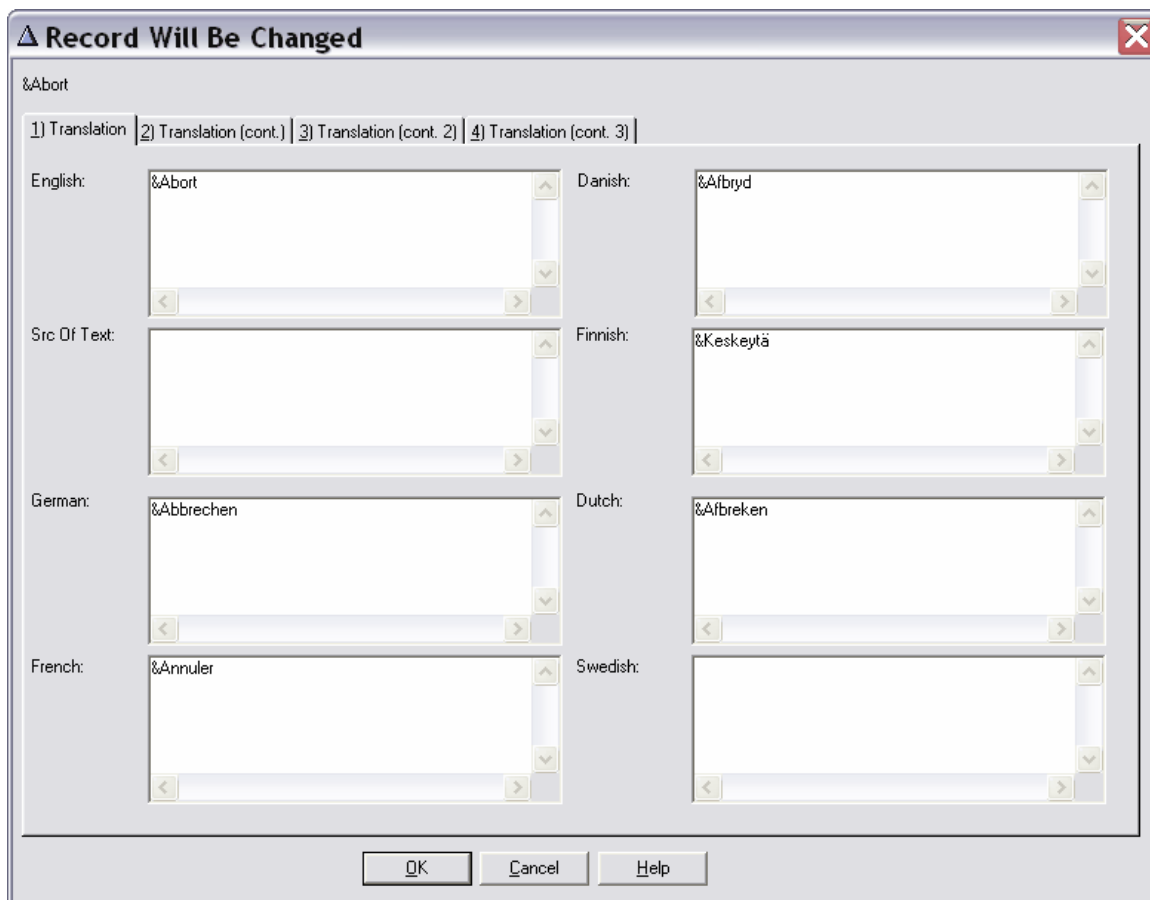
A [Config](#) Button is provided to call a procedure to Configure the Headers and form prompts for the BTL file in current use.

A [PickList](#) Button is provided to Call a procedure to get a previous BTL file to Edit.

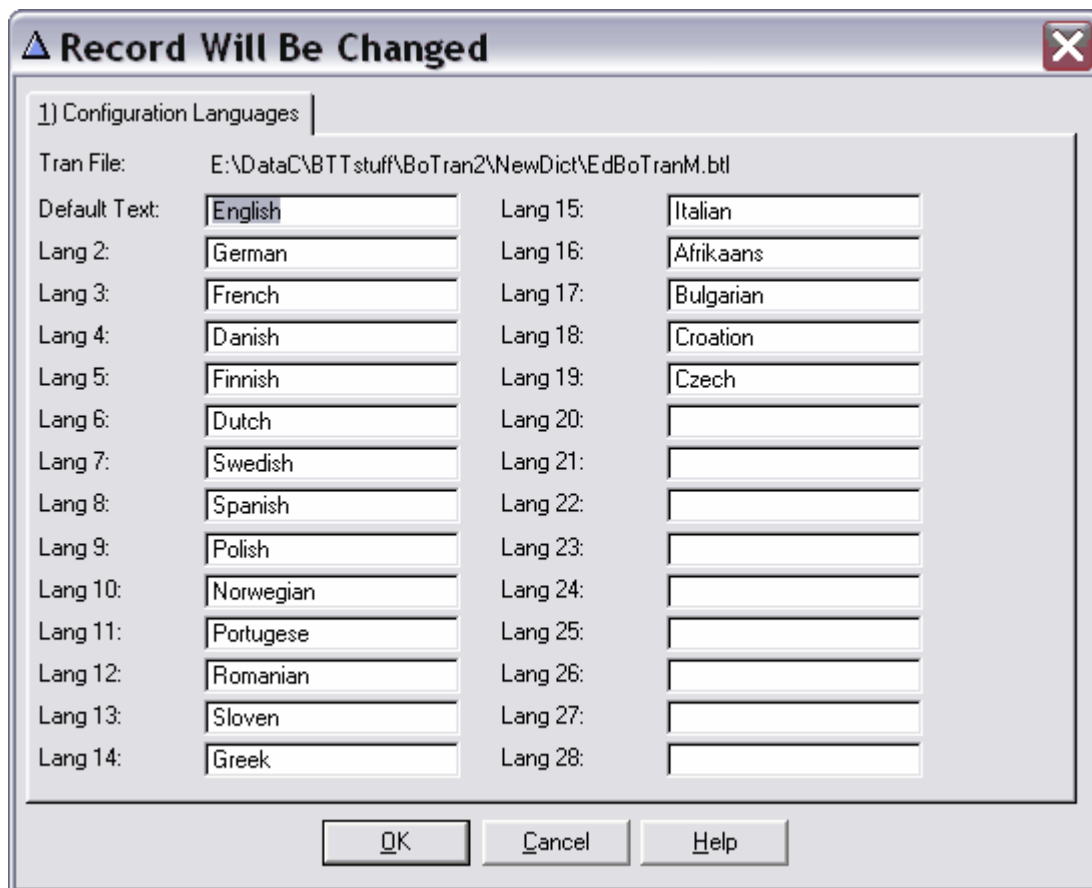
The form has text fields to support Dual Entry characters and Line Feeds for [Multi-Line ToolTips](#).

**Do not use Line Feeds except for ToolTips. Do Not Edit Field One, your default Language** used for the lookups, except for Multi-Line tooltips, or adding additional translations.

**Changing Default Language field can cause BoTran2 to fail** in looking up your text for translation. Only change it as instructed.

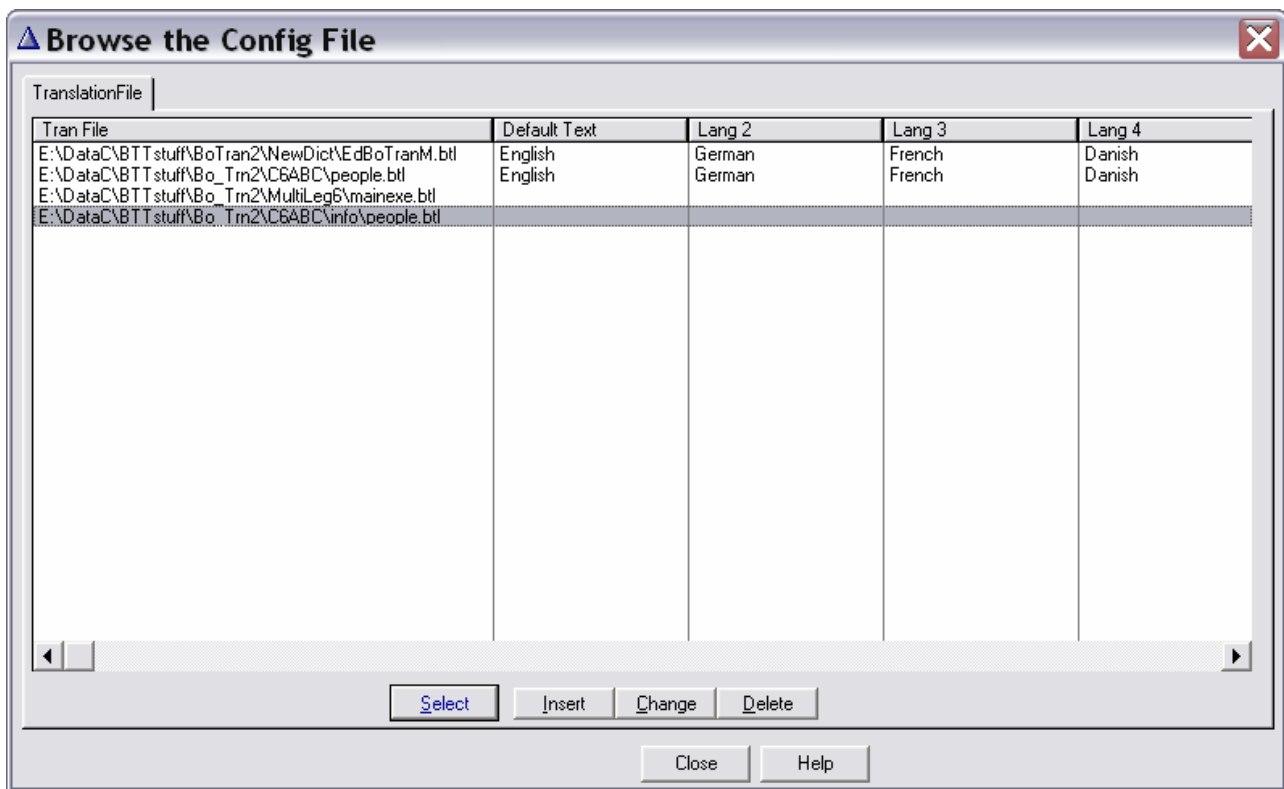


### 5.3.5.1 Configure



Add the appropriate Languages to the Fields that are used to Configure the Browse Box headers and form prompts.

## 5.3.5.2 PickList

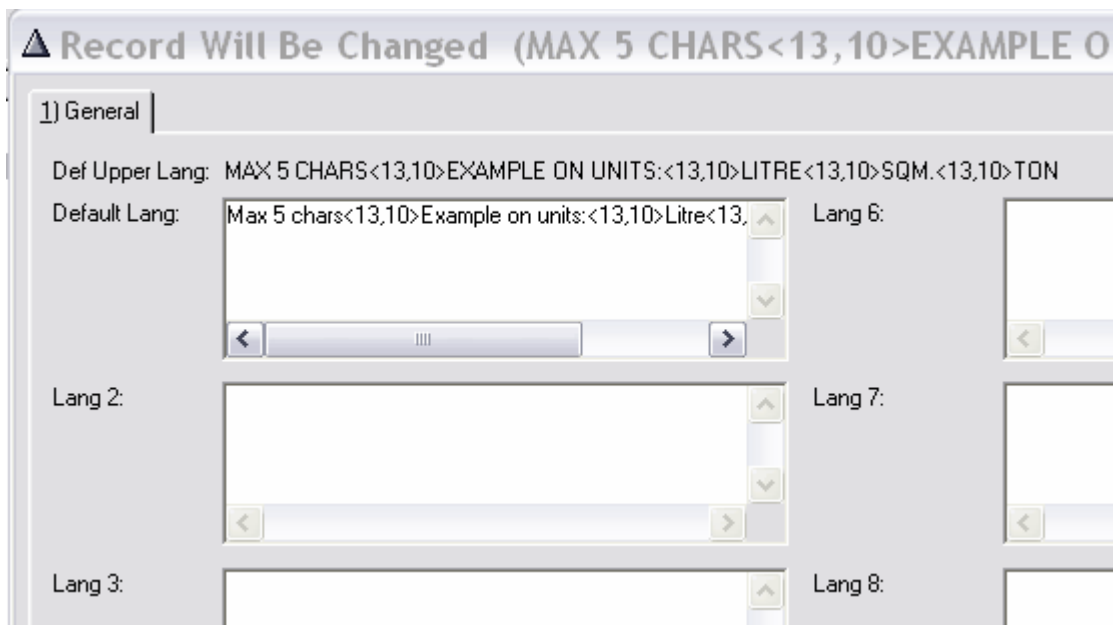


Use the pick list to Select a previous edited file to edit.

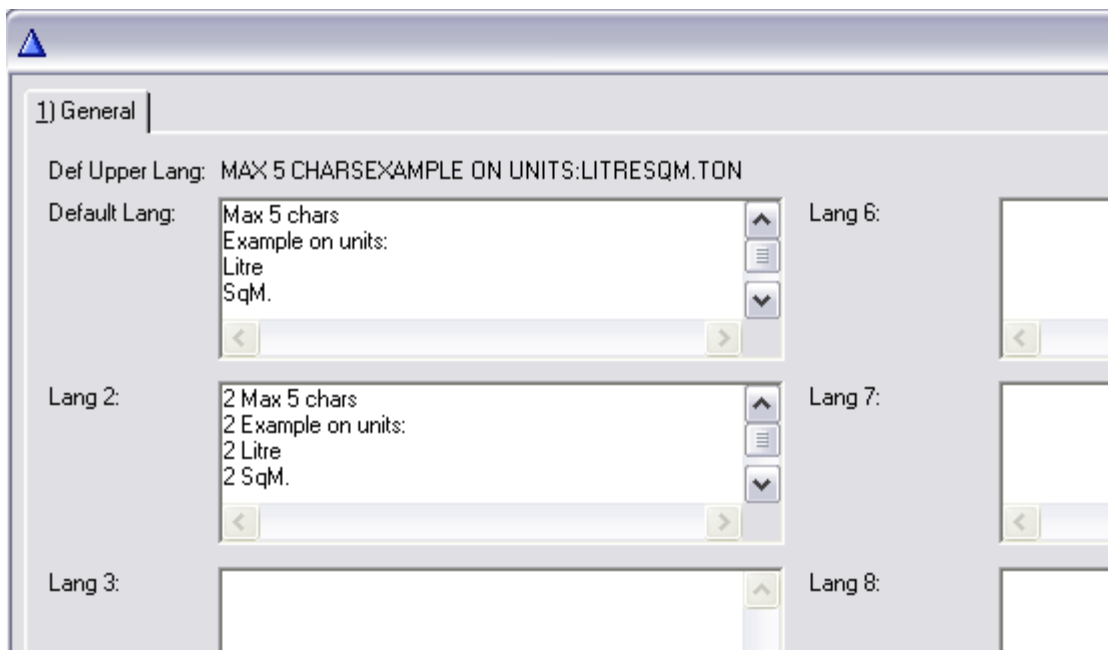
## 5.3.5.3 Multi-Line Tool Tips

Clarion's IDE tends to store and output LineFeeds as <13,10>  
Especially when using strings and entry fields.

BoTran2 needs them stored as Hex, the same way Clarion stores them in a text file.  
Example of jumpstart **"string"** output storage of multi-line tool tip in BTL file.

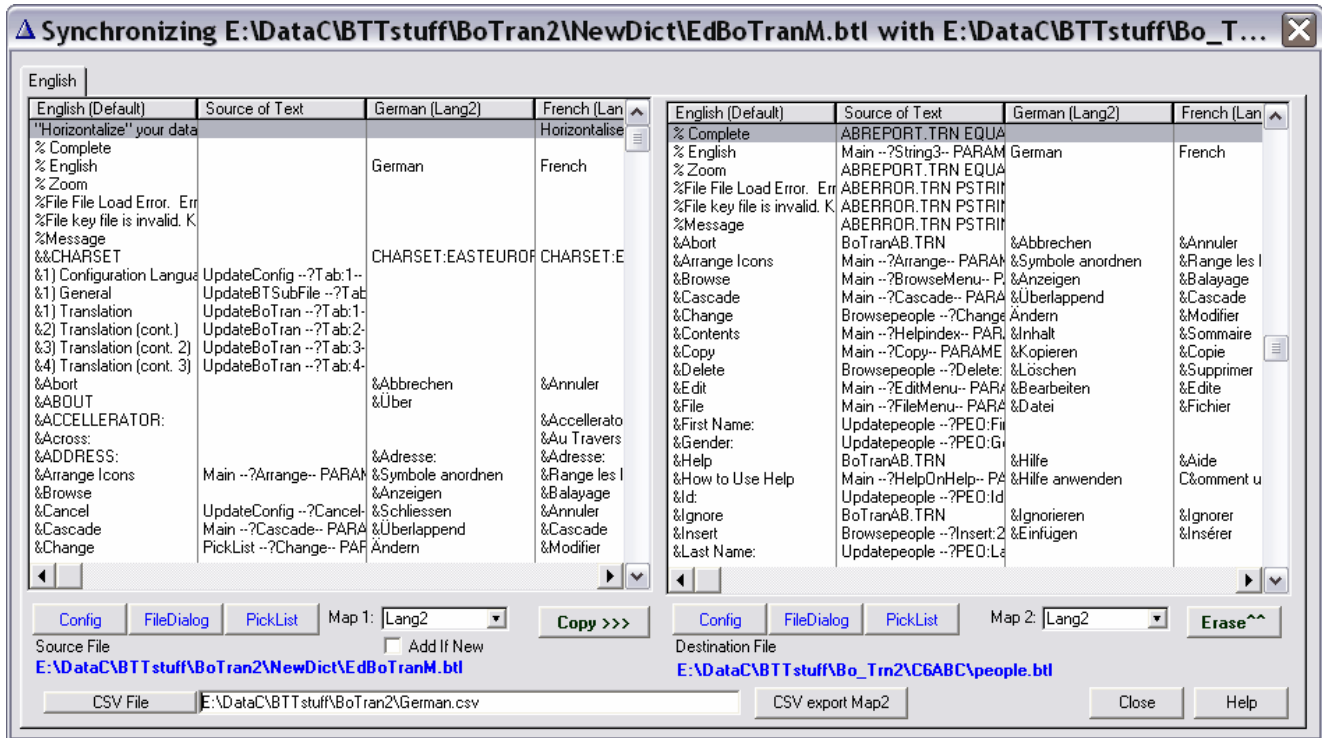


You have to manually edit the Default Language and **replace** the "**string**" LineFeeds ( <13,10>) with the hex LineFeed values using the "**Enter**" **Key** and manually deleting the '<13,10>'



BoTran2 can now correctly find the string in the queue and replace with the appropriate value.

### 5.3.6 Copy Trans (CSV export)



This procedure allows you to add entries from any existing BoTran2 BTL Language files to a new one.

You must **Map 1** a field in the source file to select the column to transfer from.

You must **Map 2** a field in the destination file to receive the text from the string file.

The **copy>>>** button will transfer translations to the destination file. It will only copy translations for existing text in the destination file, unless you have checked the **Add If New** checkbox. Then it will add new translations and default words to the destination file. This is useful for building **Master** files for creating other app translation files.

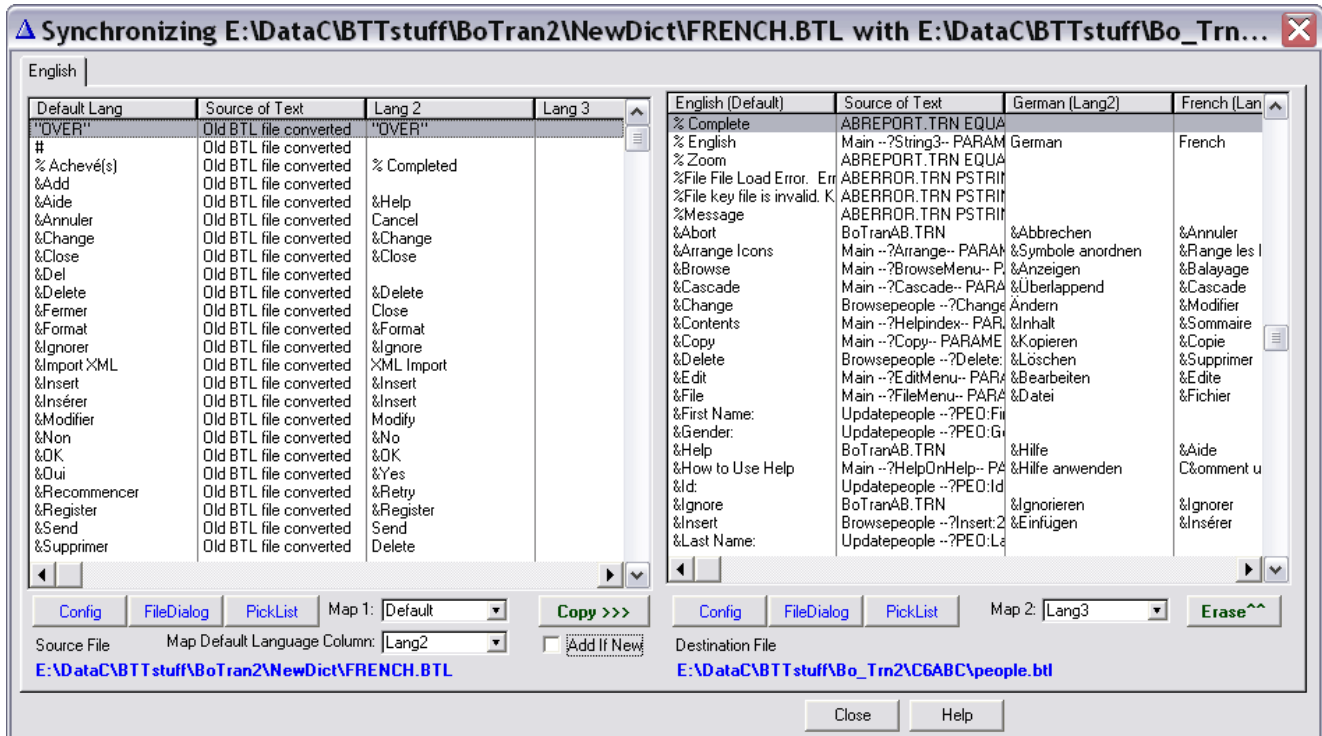
The **Erase^^** button will delete all entries in the mapped column for maintenance reasons.

A **FileDialog** is provided to pick a New Destination BTL file to edit.

A **Config** Button is provided to call a procedure to Configure the Headers and form prompts for the BTL file in current use.

A **PickList** Button is provided to Call a procedure to get a previous BTL file to Edit.

### 5.3.7 RevMrg Trans



The Reverse Merge Translation Procedure is for Merging Translations from BoTran2 Translation Files that have a Default Language different than your master dictionary. In this case, I have English as the default for my Master Dictionary.

French is the default language for the Language file I am importing or Merging from. I would therefore Map "Default" into the "Map 1" drop down to use that column from the source file to put into the "Map 2" column, which is "Lang3" in the destination file. Then I would set "Map Default Language Column" to "Lang2" in the Source file, as that is the column that has the English Translation in it that I need for the Default Language for the destination file. I check the "Add If New" because I want to store all translations in my **Master** Translation Language File for use in later translation files for new apps.

## 6 BSub File

You can view the file with TopScan, repair it, pull it into the dictionary, but don't change any fields or keys in it or it will be unusable by the BoTran2 classes.

```
BSubFile FILE,DRIVER('TOPSPEED'),NAME(BoTran2SubFilename),PRE(BTS),
BINDABLE,CREATE
KeyDefText KEY(BTS:DefText),NOCASE,PRIMARY
Record RECORD
DefText STRING(256)
SubText CSTRING(256)
```

END  
END