

# How to Create a Language Dictionary

*SYSPRO 8 Technical Article*

Last Published: March 2021



## SYSPRO Help and Reference

Copyright © 2021 SYSPRO Ltd

All rights reserved

No part of this document may be copied, photocopied, or reproduced in any form or by any means without permission in writing from SYSPRO Ltd. SYSPRO is a trademark of SYSPRO Ltd. All other trademarks, service marks, products or services are trademarks or registered trademarks of their respective holders.

SYSPRO Ltd reserves the right to alter the contents of this document without prior notice. While every effort is made to ensure that the contents of this document are correct, no liability whatsoever will be accepted for any errors or omissions.

This document is a copyright work and is protected by local copyright, civil and criminal law and international treaty. This document further contains secret, confidential and proprietary information belonging to SYSPRO Ltd. It is disclosed solely for the purposes of it being used in the context of the licensed use of the SYSPRO Ltd computer software products to which it relates. Such copyright works and information may not be published, disseminated, broadcast, copied or used for any other purpose. This document and all portions thereof included, but without limitation, copyright, trade secret and other intellectual property rights subsisting therein and relating thereto, are and shall at all times remain the sole property of SYSPRO Ltd.

# Contents

---

<b>Creating a Dictionary Overview .....</b>	<b>3</b>
<b>Steps to Create a New Language Dictionary.....</b>	<b>4</b>
Recording new phrases.....	4
Creating a foreign language dictionary.....	5
Verifying the new dictionary.....	8
Saving and distributing the new dictionary.....	11
<b>Original and Standard Languages .....</b>	<b>12</b>
<b>Language FAQs .....</b>	<b>13</b>
Is it easy to view and edit the SYSPRO language dictionaries?.....	13
How does SYSPRO show phrases using non-English languages? .....	14
Is the length of the phrase important? .....	14
How does the system handle variable data? .....	14
Do the phrases have to be in alphabetical order? .....	17
What happens if I have the same phrase defined twice?.....	17
Are all languages supported?.....	17
How do I choose a language code? .....	17
What if something does not seem to translate?.....	18
How often do I need to translate phrases? .....	18
Can I use an automated translation? .....	19
What about technical jargon and abbreviations?.....	19
Does language translation require a specific SYSPRO release? .....	19
Are the English phrases case sensitive?.....	19



# Creating a Dictionary Overview

---

There are two methods of creating a SYSPRO language dictionary:

1. Start with a list of all current English phrases and translate them all.
2. Create a subset of all English phrases and translate the ones you require.

*Method 1* is the most thorough, but also the most expensive in terms of time and cost, as there are a very large number of English phrases used in the entire SYSPRO product. For example, there are over 40,000 phrases (consisting of over 180,000 words) as of February 2021.

*Method 2* allows you to start creating a new dictionary by using the SYSPRO software in a special mode that records all phrases encountered. You can run the parts of the software that your end-users will use and then utilize the list of phrases encountered by the software to drive your translation effort. You may still need to translate several thousands of phrases – but considerably fewer than translating the entire system.

It is this second method that is described in more detail in this document: How to enable the special recording mode and where the empty dictionary is created ready for you to add your translation.

If you wish to use method 1 then contact SYSPRO for the latest complete list of English phrases. As mentioned this is a serious undertaking and will be expensive and time consuming.

# Steps to Create a New Language Dictionary

---

The following steps guide you through the process to record English phrases and create a foreign language dictionary.

In the example below, we are going to create a Portuguese dictionary (language code 'PT').

*Note:* This assumes that you already have SYSPRO 8 running successfully in a standalone environment.

## RECORDING NEW PHRASES

1. Create a file in the application server `BASE` folder named:

```
Lang_EN_Syspro_Core.TXT
```

*Considerations:*

- The file can be any size (even empty).

2. Login to SYSPRO and run as normal.

*Considerations:*

- Ideally you should use a TEST company to ensure that you do not inadvertently change any settings or data whilst performing the following steps.
- As you run each program, all new captions encountered will be written to the new English phrase file.
- If a phrase appears multiple times, only one occurrence will be output to the English phrase file.
- Run each program and perform each function that your end-users will be using. Use the software just as they would in the live environment.

3. Logout of SYSPRO to stop recording new English phrases.

4. If required, you can login multiple times and run additional programs and/or additional functions.

*Considerations:*

- New phrases will only be added to the English phrase file if they have not already been captured.

When you have finished recording English phrases you are ready to start creating the foreign language dictionary.

## CREATING A FOREIGN LANGUAGE DICTIONARY

1. Verify that the English phrases have been captured.

*Considerations:*

- The English phrase file is in plain text, so you can use any text editor to verify that the file has been generated.
- The file can be found in your application server `BASE\SETTINGS` folder named:

```
Lang_EN_new.TXT
```

2. When you are satisfied that the new phrases have been recorded, switch off the special recording mode by deleting the file in `BASE` named:

```
Lang_EN_Syspro_Core.TXT
```

- Warning:** Be careful to ensure you are deleting the correct file. If you prefer, rename the file – for example to: `Lang_EN_Syspro_Core_Saved.TXT`

3. Determine the two-character language code for the required language.

*Considerations:*

- We recommend that you select your language code from the ISO-693-1 standard list of two-character language codes.
- You can find a local copy of the languages and their two-character codes in your application server `BASE\STORE` folder in a file named:

```
IMPLNG.IMP
```

- We will use the language code 'PT' (Portuguese) in our example.

4. Copy the list of English phrases you have just generated to a new folder.

*Considerations:*

- Remember the file containing the newly created phrases can be found in your application server `BASE\SETTINGS` folder named:

```
Lang_EN_new.TXT
```

- Once copied, immediately edit the file using a plain text editor (such as Notepad) and append the following line at the end:

```
; ---- End of new phrases - dated yyyy-mm-dd
```

*(Replace 'yyyy-mm-dd' with the current date)*

Adding this comment will help in future if you decide you wish to add more phrases.

*Note:* Lines beginning with a semi-colon (;) are treated as comments and ignored by the language translation engine.

5. Copy the file containing the new phrases to a file name that will be used for the new dictionary:

`Lang_PT.TXT`

*(Where PT is the two-character language code representing your new language)*

6. Edit the new language dictionary `Lang_PT.TXT` and add the foreign language phrase below each English phrase.

**Warning:** Do not change or delete the English phrases else the translation will not work. i.e. each English phrase should immediately be followed by the foreign language equivalent.

Take note of some of the rules explained later in this document – such as how to handle variable data.

7. Once you have added the foreign language phrases you are ready to verify your newly created foreign language dictionary.

## UNDERSTANDING THE LANGUAGE FILE

Each new English phrase consists of three lines in the file:

- 1) The first line starts with a semi-colon (;) and is a comment.
  - The special recording mode outputs a comment indicating the program name that was running when the new phrase was first detected, the dates and time when the line was added and the operator code that was running SYSPRO.  
This information can help pinpoint what caused this phrase to be added.
  - You may remove these comment lines once the translation has completed. It will help reduce the size of the dictionary and in some cases makes the translations easier to read.
- 2) The second line starts with a colon (:) and is the English phrase.
  - The English phrase is output with the original case and will contain variables such as %1, %2, etc. if variable data is found.
  - For more information see the topic about variable data later in this document.
- 3) The third line starts with a greater-than sign (>) and is a placeholder for the foreign language phrase
  - This is where your translated text should be captured.

See the following fragment example from a new dictionary:

```
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Password
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:User name
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Company
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Company password
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Forgot password?
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:View users
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Exit SYSPRO
>
; Program: IMPACT Date: 2020/12/01 13:52:32 User: RUSS
:Program protected as described in Help About SYSPRO
>
; Program: IMPACT Date: 2020/12/01 13:52:33 User: RUSS
:Connecting to database '%1'
```



## VERIFYING THE NEW DICTIONARY

These steps indicate how to verify that your new language dictionary works as expected:

1. Copy your new dictionary to the application server `BASE` folder – for example:

```
Lang_PT.TXT
```

2. Configure SYSPRO to use your new dictionary.

*Considerations:*

- We recommend that you copy the existing shortcut that you use to run SYSPRO and append a new parameter:

```
/Lang=PT
```

- Be sure to add this to the end of the current shortcut parameters. Ensure that there is a space before the '/' character and no other spaces after the '/' character.

You can now use the original shortcut to run SYSPRO in English and the new one to run SYSPRO in Portuguese.

Ensure to rename the newly created shortcut so that it's clear that the new one is Portuguese.

3. Login to SYSPRO using the Portuguese shortcut.

*Considerations:*

- You should immediately notice that phrases that previously showed in English now display in the foreign language using the new language dictionary.
- To verify this, we recommend that you (as a minimum) ensure that the phrases on the main SYSPRO login dialog are translated. i.e. the captions highlighted as follows should appear in your new language:

- This includes the following phrases:
  - User name
  - Password
  - Company
  - Company password
  - Forgot password?
  - Exit SYSPRO
  - Program protected as described in Help About SYSPRO
- The caption on the 'Login' button cannot be changed as this is a current limitation of the login dialog.
- Verify the rest of the software is working in the selected language.
- Remember that only programs and functions that you used when recording the new phrases will appear in the dictionary and therefore only these phrases will have been translated.

4. If you require additional phrases to be translated, perform a modified process of repeating the original steps:

- Logout of SYSPRO.
- Copy your saved file containing the new English phrases (the one where you appended your comment with the date) back to the application server `BASE\SETTINGS`

`Lang_EN_new.TXT`

*Considerations:*

- Overwrite the previous file if it is still in the folder.
- Reminder: This is the English phrase file without any new translations. It contains a comment at the bottom indicating where you had last finished translating.
- Recreate the file used to start recapturing phrases again in `BASE`

`Lang_EN_Syspro_Core.TXT`

- If you previously renamed this file – simply rename it back again.
- Run SYSPRO using the original (English) shortcut.
- Run additional programs and/or additional features so that all the phrases to be translated are shown.

This will append any new phrases encountered to the new English phrase file.

Once you have finished capturing the new phrases, proceed to step 5.

5. Stop the recording mode by removing/rename the indicator file in the `BASE` folder

`Lang_EN_Syspro_Core.TXT`

6. Recopy the new phrase file in `BASE\SETTINGS` named `Lang_EN_new.TXT` to your saved folder.

Edit the copied file and append a new comment indicating this is the end of the newly captured phrases with the current date.

7. Copy and paste the new English phrases added since the last time you had the phrases translated and into the dictionary `Lang_PT.TXT`.

8. Edit the new dictionary and insert the foreign phrases against each new phrase.

9. Copy the dictionary back to the application server `BASE` folder

`Lang_PT.TXT`

10. Retest the dictionary by running SYSPRO again using the Portuguese shortcut.

## SAVING AND DISTRIBUTING THE NEW DICTIONARY

We recommended that you apply a header to your newly created language dictionary to help with self-documenting the dictionary.

Copy and paste the following few lines of text to the beginning of the dictionary:

```
; SYSPRO translation file
; =====
; Language : PT - Portuguese
;
; Pairs of lines starting
; ':' English text and
; '>' Translated text
;
; Last update : 2020/12/01 14:20
;
```

Once you are satisfied with your custom dictionary in `BASE` named `Lang_PT.TXT`, you should save the file and copy it to your live system application folder `BASE` folder.

In a client-server environment, when someone logs into SYSPRO using the **/Lang=PT** command line property, the Language dictionary named `Lang_PT.TXT` will be transferred to the client's `BASE` folder – ensuring that the user experiences SYSPRO in Portuguese.

Remember to save (backup) the newly created dictionary and the one containing the list of new English phrases for future reference. These files will be important if you wish to maintain the dictionary in future.



# Original and Standard Languages

---

The SYSPRO 8 product is developed and maintained in English and is shipped with the following five language dictionaries:

- DE – German
- ES – Spanish
- FR – French
- RU – Russian
- ZH – Chinese

We call these ‘Standard languages’ – any language outside this list will be called a ‘non-standard language’.

When configured appropriately, this means that all the user interface elements will use the selected language allowing personnel who only speak the language to work effectively. In addition, report captions and headings are also presented using the selected language.

This document explains how it’s possible for additional ‘non-standard language’ dictionaries to be developed and used by an end-user or SYSPRO partner.

# Language FAQs

---

## IS IT EASY TO VIEW AND EDIT THE SYSPRO LANGUAGE DICTIONARIES?

The SYSPRO language dictionaries are plain text and can readily be edited as required.

New phrases can be added, and existing ones changed, using a simple editor. Each dictionary has a short header that describes the language together with some additional properties.

For example, the first few lines of the German dictionary named (Lang\_DE.TXT) are as follows:

```
; SYSPRO translation file
; =====
; Language : DE - German
;
; Pairs of lines starting
; ':' English text and
; '>' Translated text
;
; Last update : 2018/06/30 10:10
;
:- Account Type
>- Kontotyp
:- Activity Location
>- Aktivität Ort
:- Activity Regarding
>- Aktivität Betreff
:- Activity Result
>- Aktivität Ergebnis
:- Activity Type
>- Aktivität Typ
:- Adding Contacts to the Customer
>- Kontakte für den Kunden zufügen
:- Adding Contacts to the Supplier
>- Kontakte zum Liefer. hinzuf.
:- Contact name
>- Kontakt Name
```

Note that each entry consists of a pair of lines:

The original English phrase starts on a line beginning with a colon (:) and the following line contains the foreign language text on a line beginning with a greater-than sign (>).

All characters are relevant (including leading and embedded) spaces.

In the example above all the phrases start with a hyphen and are followed by a space ('- ')

## HOW DOES SYSPRO SHOW PHRASES USING NON-ENGLISH LANGUAGES?

The SYSPRO 8 application has been developed so that all phrases displayed are routed through a translation engine. This includes all user interface elements.

The translation engine uses the English word or phrase and looks it up in the selected foreign language dictionary. If the phrase is found, then the foreign language phrase is shown instead of the original English one. If the phrase is not found, the original English phrase is shown.

Therefore, if you have selected to use SYSPRO in a foreign language and see some English phrases, you know that the phrase has not been included in the language dictionary.

## IS THE LENGTH OF THE PHRASE IMPORTANT?

The answer is – it depends...

For shorter phrases we suggest that you keep the translated phrase to a similar length to the original English phrase if possible – even if you must use abbreviations.

However, longer messages (especially messages that appear in messages boxes or task dialogs) can be longer if required.

The reason for this is that the positioning and size/width of various user interface elements such as forms, list views and toolbars are created with approximately the width of the original English phrase – often with a little extra space. If your foreign language translation is much longer when rendered on the screen than the original phrase, the user may not see the entire phrase, making the software harder to use without resizing and/or repositioning interface elements.

For longer phrases, the message box or task dialog will automatically adjust to fit any new phrase – in this case the length is not so important.

In all cases there will be a maximum length for the translated phrase so try and avoid excessively verbose phrases.

## HOW DOES THE SYSTEM HANDLE VARIABLE DATA?

Variable data is easiest explained using a few examples:

### ALPHANUMERIC VARIABLE DATA

Imagine the message being shown to the user is:

```
Stock code 'A100' not found
```

Clearly the stock code A100 must not form part of the translation, else you would have to have a separate, unique, translation of every stock code. In this case the stock code A100 is the *variable* data.

The way that the SYSPRO language translation engine handles variable alphanumeric data is as follows:

1. The phrase passed to the translation engine looks for variable data – in this case it is indicated by a phase between a set of single quotes (').
2. Variable data is replaced by a variable placeholder.  
The first piece of variable data in the phrase is assigned the placeholder %1, the second %2 etc.
3. Thus, the phrase will be modified to be:
  - Stock code '%1' not found
  - And the variable %1 is saved as: A100
4. The dictionary is searched for the parameterized English phrase and if found, the foreign language phrase returned – for example in German this will be:

```
Artikel '%1' nicht gefunden
```

5. Then the parameters will be expanded, so that the final phrase shown to the end user is:

```
Artikel 'A100' nicht gefunden
```

Many variables are supported in a single phrase. Note that the sequence of the variables in the foreign language phrase does not have to be the same as the English phrase – if you use the same %1, %2 etc. variables, they will be expanded correctly.

The entry in the German dictionary named `Lang_DE.TXT` that demonstrates this includes:

```
:Stock code '%1' not found  
>Artikel '%1' nicht gefunden
```

## NUMERIC VARIABLE DATA

Imagine the message being shown to the user is:

```
27 transactions deleted
```

Clearly the number (27) must not form part of the translation, else you would have to have a separate, unique, translation of every number of transactions. In this case the number 27 is the variable data.

The way that the SYSPRO language translation engine handles variable numeric data is as follows:

1. The phrase passed to the translation engine looks for variable data – in this case it is indicated by a phase that consists of only numeric digits (and optionally decimal indicator and/or sign).
2. Variable data is replaced by a variable placeholder.  
The first piece of variable data on the phrase is assigned the placeholder %1, the second %2 etc.



3. Thus, the phrase will be modified to be:
  - %1 transactions deleted
  - And the variable %1 is saved as: 27
4. The dictionary is searched for the parameterized English phrase and if found, the foreign language phrase returned – for example in German this will be:

```
%1 Transaktionen gelöscht
```

5. Then the parameters will be expanded, so that the final phrase shown to the end user is:

```
27 Transaktionen gelöscht
```

The entry in the German dictionary named `Lang_DE.TXT` that demonstrates this includes:

```
:%1 transactions deleted
>%1 Transaktionen gelöscht
```

## DATE VARIABLE DATA

Imagine the message being shown to the user is:

```
Ship date 2020-11-30 is invalid or too early
```

Clearly the date (2020-11-30) must not form part of the translation, else you would have to have a separate, unique, translation of every date. In this case the date 2020-11-30 is the variable data.

The way that the SYSPRO language translation engine handles variable date data is as follows:

1. The phrase passed to the translation engine looks for variable data – in this case it is indicated by a phrase that consists of only numeric digits and date formatting characters.
2. Variable data is replaced by a variable placeholder.  
The first piece of variable data on the phrase is assigned the placeholder %1, the second %2 etc.
3. Thus, the phrase will be modified to be
  - Ship date %1 is invalid or too early
  - And the variable %1 is saved as: 2020-11-30
4. The dictionary is searched for the parameterized English phrase and if found, the foreign language phrase returned – for example in German this will be:

```
Lieferdatum %1 ist ungültig oder zu früh.
```

5. Then the parameters will be expanded, so that the final phrase shown to the end user is:

```
Lieferdatum 2020-11-30 ist ungültig oder zu früh.
```

The entry in the German dictionary named `Lang_DE.TXT` that demonstrates this includes:

```
:Ship date %1 is invalid or too early
>Lieferdatum %1 ist ungültig oder zu früh.
```

## DO THE PHRASES HAVE TO BE IN ALPHABETICAL ORDER?

No, the English phrases can be in any sequence. The phrase immediately below the English phrase is the equivalent foreign language phrase.

However, if you retain the phrases in alphabetical sequence it is easier to avoid duplicates. This helps prevent wasting time translating the same phrase twice.

## WHAT HAPPENS IF I HAVE THE SAME PHRASE DEFINED TWICE?

The last occurrence of any duplicated phrase will override any prior entries.

If you find that a phrase does not seem to be translating correctly, check that you have not inadvertently duplicated the phrase later in the dictionary.

## ARE ALL LANGUAGES SUPPORTED?

Many languages will work using the techniques described in this document. Especially most European based languages.

However, some languages, such as right-to-left languages are not supported.

In addition, some multi-byte languages will not work or may require additional definition to get them to work effectively.

If in doubt you should verify that the language works as expected with a small subset of the phrases (for example try out the login dialog and some captions on the menu), before committing to a greater translation effort.

We have tested several languages at SYSPRO but by no means was this a comprehensive list of the many hundreds of possible languages.

## HOW DO I CHOOSE A LANGUAGE CODE?

We recommend that you select your language code from the ISO-693-1 standard list of two-character language codes.

You can find a local copy of the languages and their two-character codes in your application server `BASE\STORE` folder in a file named:

```
IMPLNG.IMP
```

If the language you wish to add is not in this list, or you want to create a variant of one of the languages, we suggest that you assign a two-character language code that does not already exist.

## WHAT IF SOMETHING DOES NOT SEEM TO TRANSLATE?

First check that your dictionary is being used by verifying the login dialog and some of the initial captions shown on the SYSPRO menu.

If this does not work, check you have saved the language dictionary in the application server `BASE` folder with the name `Lang_XX.TXT` – where `XX` is your two-character language code.

Next verify that your SYSPRO shortcut has the property `/Lang=XX`.

If this works but some phrases are not translating, proceed as follows:

- Verify that the English phrase is included exactly as shown and starts on a line that begins with a colon (:).
- Verify that the very next line in the dictionary contains the foreign language phrase on a line that begins with a greater-than sign (>).
- Verify that you have not duplicated the English phrase later in the dictionary as the last occurrence of duplicate entries is used.
- Check you have not inserted special characters into the dictionary that could be corrupting the dictionary.

## HOW OFTEN DO I NEED TO TRANSLATE PHRASES?

Once you have created a foreign language dictionary, this can be used effectively by end-users. However, over time the SYSPRO product will be enhanced or changed and new phrases may be introduced.

When the phrases have already been translated (for example they occurred in another program) then they will work.

If the phrase has never been included in your dictionary, then they will appear in English.

In this case you will find that from time-to-time you should repeat the process described earlier in this document to capture new phrases, translate them and apply them to your existing dictionary.

Depending on how many end-users are using the generated dictionary, you may want to repeat this process each time a new release of SYSPRO is made available.

**Important:** You should factor in the time and cost of the ongoing maintenance when considering creating and maintaining a foreign language dictionary.

## CAN I USE AN AUTOMATED TRANSLATION?

Due to the importance of accurate captions to ensure that end-users are using the software effectively, it is our experience that you should avoid the use of automated language translation software to create the foreign language dictionary.

Some translation efforts can start by using the output from an automated system, however we strongly suggest that a professional language translator is used to generate the final dictionary.

## WHAT ABOUT TECHNICAL JARGON AND ABBREVIATIONS?

We have a document that can be provided to professional translators explaining and listing some of the abbreviations and technical jargon.

Most translators will not know what the following means:

- The modules: AR, AP, GL, MRP
- Business jargon such as: Lots, Bins or Serials, Sold-to-address, Requisition line, ABC element, Inventory UOM, ...

Many languages require a deeper understanding of the phrase to ensure the correct syntax is being applied. Be prepared to answer some of these questions when engaging with a professional translator.

## DOES LANGUAGE TRANSLATION REQUIRE A SPECIFIC SYSPRO RELEASE?

Most of the translation capabilities described in this document work in all versions of SYSPRO 8.

However, the ability to record specific phrases and create an empty English dictionary to start your own foreign language dictionary is relatively new.

This capability requires SYSPRO 8 2020 R2 or later.

## ARE THE ENGLISH PHRASES CASE SENSITIVE?

The English phrases are captured in their original case. However, the English phrases are not case sensitive.

The Foreign language phrase will be output in the exact case defined in your language dictionary.



[www.syspro.com](http://www.syspro.com)

Copyright © SYSPRO. All rights reserved.  
All brand and product names are trademarks or  
registered trademarks of their respective holders.

