# Dictionary Format and Notation

This document describes how to maintain the dictionaries used for dynamic translation of the Maconomy Application. The document contains a short introduction to dynamic translation, followed by descriptions of a number of properties and options to be used when creating and maintaining the dictionaries. Moreover, the document contains examples of comments to be used for avoiding ambiguity in a dictionary.

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# 2 Dynamic Translation

The overall objective of dynamic translation is to release only one language version of Maconomy. By means of language dependent *dictionaries*, this one version of Maconomy can then be translated into any desired language. This has a number of advantages:

- Maconomy does not have to maintain a potentially large number of language dictionaries—a task which requires specialized skills.
- Users within an organization, working on the same system, can use Maconomy in different languages.
- Any language can come into consideration for translation—not only the four languages traditionally supported by Maconomy (US English, Danish, Swedish, and Norwegian).
- Variances in terminology, e.g. between different industries, can be reflected easily
  in the system (as exemplified through the Maconomy Solutions, which each has
  its own dictionary).
- Installation of an additional language is very easy.

Dynamic translation is based on a "World Dictionary" (language code w), which is based on the US language version of Maconomy. This dictionary includes disambiguous (unique) US texts, and allows for translation into any other language—e.g. German, Danish, or Norwegian. A dictionary used for dynamic translation is a plain text file with two, tab-separated columns. The left-hand column is the W (US English) text, and the right-hand column contains the translation into the target language (e.g. German). Together, these two columns make up the dictionary to be used for dynamic translation of a Maconomy system.

The functionality of dynamic translation causes all static data (window names, fixed texts (labels), error messages, static popup fields, layouts, and printout messages) to be automatically translated into the language specified in the dictionary. This means that in a system installed with a German dictionary, all static data is displayed in German. However, data entered by users is not translated by means of the dictionary. Information entered by a user in e.g. the window Item Information Card is thus not translated by means of dynamic translation, but is stored in the database as usual. This applies to all data entered by users, including user-defined popup values.

## 2.1 Installing Multiple Dictionaries

A Maconomy system can contain a number of dictionaries. The process of determining which dictionary to use is as follows when using the standard Maconomy client: When a user launches a client, a MaconomyServer process is launched (see the "System Overview" chapter of this manual). This process then checks which language the user wants (the user can set the desired language in the client's Preferences window). The process then reads the translation file¹ for the language in question. Translation files must be placed in the MaconomyDir\Definitions folder of the

<sup>1.</sup> To be more precise: The process generates a persitent, efficient hash table of the dictionary and makes lookups from it.

application home directory. Each translation file is named according to the following pattern: Translations.<appname>.<language code>—for instance, a German translation file could be called Translations.W\_8\_0.DE. Each file contains the above mentioned translations from W to the target language. This allows for multiple translations to exist in the same system, and allows for users to choose between the installed languages.

Furthermore, a language dictionary may contain *inclusions*. For instance, if a Maconomy Solution contains terminology changes compared to standard Maconomy, the terminology can be entered into a small dictionary. This could be called Translations.W\_8\_0.DE\_MAS (for the Maconomy Agency Solution). Users can then select that dictionary as a "language". The sub-dictionary then contains an ##INCLUDE statement, e.g. ##INCLUDE Translations.W\_8\_0.DE, which includes the main dictionary of the selected language. Maconomy will search the included main dictionary first, and then the solution dictionary. If the text is found in the solution dictionary (which is searched last), then that is what will be displayed.

When installing or upgrading Maconomy, you can specify a language which should be the default language, i.e. the language users see in their clients unless they choose otherwise.

For users of the Portal, an additional copy of the dictionaries are located on the Web server, in order for M-Script to be able to read the dictionaries. The dictionaries are installed both on the Maconomy server and the Web server by default, but if you change either of them, you must remember to update the dictionary in the other location at the same time.

The installation of dynamic translation on a Maconomy system requires add-on 60 (standard after Maconomy version 8.0). You can only benefit from dynamic localization if you have this add-on. If you have add-on 71, you can add company-specific dictionaries to your system.

#### **Dictionary Development**

The left-hand column of a dictionary (entries in W-English) is developed and maintained by Maconomy R&D. The right-hand column of the dictionary (i.e. the translations into the desired target languages) is developed at Maconomy offices in the relevant countries, possibly in cooperation with a translation company, or in cooperation with a Maconomy customer. However, as there are certain requirements as to the contents and structure of the dictionaries used for dynamic translation, Maconomy R&D is responsible for verifying and approving all dictionaries before they are put into use. The way in which this is done is beyond the scope of this manual, but if you follow the guidelines in the next sections when developing a translation file, verification should be just a matter of form.

# 3 Creating and Editing the Dictionary

A dictionary is a tab-separated text file with two columns, where the left-hand column is in the original language (W=US English), and where the desired translation is inserted in the target language (e.g. German) in the right-hand column of the text file. When you receive the dictionary, the left-hand column of the dictionary is completed. Your work consists of completing the right-hand column of the dictionary. The below example illustrates how a few lines in a "World to German" dictionary might look:

Copy BOM Stückliste kopieren

Create Budget Model Budgetmodelle erstellen

Credit Memos Gutschriften

Credit Orders Kreditaufträge

Crediting Listing Kreditierungslisten

Cut Ausschneiden

Customer Budgets Kundenbudgets

Customer Information Card Kundenstammblatt

It is a large file so you should choose your editing tools carefully. The dictionary is plain text and can in principle be created and maintained in any text editor, even Notepad. However, A more powerful text editor, e.g. Crimson Editor or TextPad, is recommended. (for warnings against using MS Excel, see the section "Format of The Dictionary" on page 385).

The dictionaries must be unambiguous (unary), which means that you cannot enter two different translations of the same term in the dictionary, and terms written in the right-hand column of the dictionary should also only appear once in the entire dictionary. These precautions must be taken in order to avoid problems with import programs and the core functionality of the system.

## 3.1 Gender Specific Translations

#### 3.1.1 Using Genders

The gender of nouns is another important aspect when using dynamic translation. In e.g. the Index and Find menus, there is a need for using different spellings depending on the gender of the option names used. An example is found in the window Sales Orders, where we see the terms "Sales Order" and "Order Line" which are used in the Index menu as the text strings "New Sales Order" and "New Order Line". These text strings are constructed in the same way—in English, they consist of the word "New" plus the name of the current item; in this case "Sales Order" or "Order Line". In the dicionary, this is expressed as "New ^0".

However, when translating text strings into another language, e.g. German, you need different translations of the term "New", as "New Sales Order" is translated into "Neuer Verkaufsorder" whereas "New Order Line" is translated into "Neue

Orderzeile". You thus need different translations of the expression "New ^0" depending on the gender of the option name. The following are examples of expressions which may be translated depending on gender:

New ^0

First ^0

Next ^0

Previous ^0

Last ^0

This is the first ^0

This is the last ^0

These types of lines are called "gender dependent strings".

If you need to use genders when translating messages and menu items, the dictionary thus needs a gender-specific translation of the gender dependent strings listed above ("New" etc.), as well as a specification of gender for each translated noun.

Furthermore, the Windows client and Java client have different ways of handling gender specification. Therefore, the template dictionary will contain a number of lines with gender dependent strings for the Windows client- namely the ones mentioned above - and a number of lines for the Java client.

#### 3.1.2 Gender in Windows Client

For the Windows client, the gender issue is handled by inserting a line for each Maconomy related noun, indicating the gender. For each gender dependent string (New ^0, Next ^0 etc.) you then insert a line with the translation of the string in question in context with each gender.

Again, we use German as an example:

In German, we have 3 genders: Masculine, Feminine, and Neuter (M, F, N). A section of the dictionary used for translating from English to German might look as follows (except the top row):

## W Expression	DE Expression	Comment
Sales Order	Verkaufsorder	Translation of a noun.
Order Line	Orderzeile	Translation of a noun.
Verkaufsorder@Gender	M	Specification of gender, in this case the Masculine. Note that the translated term "Verkaufsorder" is in the first column. This is the only instance where you are permitted to add/change the first column.
Orderzeile@Gender	F	As above, but Feminine.

## W Expression	DE Expression	Comment
New ^0@M	Neuer ^0	Translation of "New ^0" when "^0" is Masculine.
New ^0@F	Neue ^0	As above, but Feminine.
New ^0@N	Neues ^0	As above, but Neuter.

Moreover, you must also add the following translation to the dictionary:

New  $^0$  Neue(r/s)  $^0$ 

This translation is automatically chosen if no gender has been specified for a certain word (by omission). If you do not enter this expression in the dictionary, and if you forget to specify the translation of a certain word or sentence, the word or sentence will not be translated, and is hence displayed in English in the system.

When generating the translation of the text "New Sales Order" for the Index menu, Maconomy will now lo

ok up the translation of the word "Sales Order" and finds "Verkaufsorder". Maconomy then looks for the gender specification of "Verkaufsorder" and finds that it is masculine. In turn, the masculine translation of "New ^0" is looked up, and the result is "Neuer ^0", "^0" being replaced by "Verkaufsorder".

#### 3.2 Notation

#### 3.2.1 Placeholders and @ instructions

Besides the core translation of terms to be used in the system, you should consider the use of comments and notations as well as the structure of variables as these are essential to the correct use of the dictionary. Some of the most essential notations are described below:

<x> means a variable or a placeholder. An <x> indicates that some kind of text or number is later to be inserted in the current text string instead of the variable in question. The text to be inserted is typically some kind of identifier as for example a customer number or a job number. When you translate this kind of expression, it is critical that you have the same number of <x>'s in both columns (be very careful to avoid typos). Furthermore, you must not change their order, because the variables are simply numbered from left to right.

Placeholders can also have the form " $^1$  ...  $^2$ " ... etc. This type of placeholder has the same meaning as the <x> type of placeholder. One important difference, however, is that you can reorder placeholders of this kind; i.e. in your translation you can e.g. swap the sequence of  $^1$  and  $^2$ , if the grammar of the target language requires this.

See "Gender Specific Translations" on page 379.

If entries in the left-hand column of the dictionary have a "...@Popup" extension or start with "#POPUP:", it means that the entry is only used in popup menus (e.g., Quote, Sales Order, and Credit Order for order types). The right-hand column of the

^1 ... ^2

...@Gender

...@Popup/ #POPUP: dictionary must contain the translation of the actual expression, i.e. without "@Popup"/"#POPUP". For instance:

Sales Order@Popup

Verkaufsorder

...@<Window name>

The notation "...@<Window name>" in the left-hand column of the dictionary means that the translation of a particular field name pertains to the specified window only. The right-hand column of the dictionary must contain the translation of the actual expression. Note that the name of the window is the kernel (database) name. Below is an example of this (note that this functionality is deprecated, but still permitted):

Payment No.@Show\_CreditorReconciliation Zahlungsnr.

...@Menu

The notation "...@Menu" in the left-hand column of the dictionary means that the translation only pertains to the name as shown in the Menu menu. The right-hand column of the dictionary must contain the translation of the actual expression. An example from English to German could be the string displayed below.

Accounts Receivable@Menu

Debitoren

...&...

In the menu bar of the client, one of the letters in each menu is underlined, for instance the F in File. The underlined letter is used for keyboard access to the menu. Pressing Alt + the underlined letter opens the menu in question. The underlined letter is defined by the text in the dictionary, as the letter after the "&" is underlined . For instance, &File causes the F in the File menu to be underlined. The translation should also contain the "&", but it does not have to be in the same position as in the English text. As translator, you therefore decide which letter should be the shortcut to each menu, but you must ensure that no two menus have the same shortcut letter. It is therefore recommended that you search the dictionary for occurrences of "&" or open a Maconomy system running in the language in question, and thereby determine which menus use shortcut letters and which letters are used. Based on this information, you can place the "&" in the place which results in the most logical shortcut.

An example from English to German could be the string displayed below:

&Fenster

&Window

&Action F&unktionen

...

is an HTML code for Non-Breaking Space, and is mainly used in dictionary lines pertaining to the Portal. The code is used for insertaing a space between two words while ensuring that the two words are not separated by an automatically inserted line break in e.g. a column heading too wide to fit inside the column width.

In the translation, the " " should be inserted if the translated string contains a space where the text should not break. It can even be inserted in multiple places if desired. However, you do not have to use the code in the translation, for instance if the translation consists of only one word or if a line break between two words does not disturb the meaning or or look of the translation. An example from English to German could be the string displayed below:

Customer Level Kunde Ebene

Sales Rep. Verkaufsrepräsentant

## 3.3 Abbreviations and Acronyms

#### 3.3.1 Abbreviations

Abbreviations can either be part of a fixed terminology, e.g. "Sales Rep.", or they can be used in order to save space so that the text will fit within e.g. a fixed column width. You may also experience variations between the fully written word and the abbreviation, e.g. "Sales Representative" and "Sales Rep.".

In the translation, you are free to decide whether to also used an abbreviation in the target language. However, a good rule of thumbs is to abbreviate the same terms that are abbreviated in the left-hand column.

As a translator, only your experience and look-ups in previous versions of the dictionary can help you determine why an abbreviation has been used, and how to handle the translation. However, here are a few guidelines:

- If the text seems overly abbreviated, the developer was probably trying to fit the text into a narrow space. Trying to keep the translation down to approximately the same number of characters is a good idea.
- If you are in doubt about the meaning of an abbreviation, use the TERMinAider tool to look up the context in which it is used - this may give a hint as to the meaning.
- If you are still in doubt, contact the Documentation department at HQ.

#### 3.3.2 Acronyms

Acronyms can be quite language specific, and a corresponding acronym may not even exist in the target language. Similarly, there may be cases where a term in the original language can be expressed as an acronym in the target language - and this acronym may even be the most accepted form of the term in that language.

You are free to decide whether to use an acronym for a given term in the right-hand column, and as a rule, you should choose the most accepted form of the term in the target language. However, observing the same guidelines as mentioned in the section on abbreviations is a good idea.

## 3.4 Concatenated strings

You may encounter strings in the left-hand column that appear to be broken sentences missing the first or last part.

# 3.5 Customer specific lines

In a few cases, Maconomy has developed special layouts or workflows for a customer. In order to separate the terms used in these layouts and to allow a customer specific translation of the terms, customer specific terms are always commented in curly braces.

The comment of a customer specific term contains the name of the customer in question and may also contain information indicating the use of the term.

Customer specific layouts/workflows and their terms naturally only appear in the systems of the customers in question, but as customers can span multiple countries and languages, the customer specific terms should be translated. Therefore, customer specific lines should be translated as a rule.

The following words in a comment indicate a customer specific line:

- NRK
- KA
- Københavns Amt

## 3.6 Ambiguity

#### 3.6.1 Comments

In order to ensure an unambiguous dictionary, comments can be added to a text string. A comment is written in curly brackets, { ... }, and is placed with the text string in the left-hand column of the dictionary. This kind of comment is inserted in the dictionary by the Maconomy Applications Department, and is thus a hint to how a certain term should or could be translated into the target language.

An example of a context dependent translation problem is the English term "Customer". If the dictionary translates from English to German, the term "Customer" should in some windows be translated into the noun "Debitor" and in other windows into the equivalent noun "Kunde". In order to ensure that "Customer" is translated as desired, the problem can be solved by using a comment written in brackets { ... }. The curly braces and the text inside them should be copied to the second column without translating the text inside the braces as displayed in the example below.

Bill to Customer{Debitor} Zahlungsdebitor{Debitor}

In this example, the notation "{Debitor}" specifies that the term "Customer" in this context is always translated into the term "Debitor" and hence not into "Kunde".

Another example could be the use of the term "check" which can be translated as the noun "check" being either a means of payment, or a check of something, or as a verb (if you check something for errors). In the below example, the term "Check" is used as a noun and the comment "{MeansOfPayment}" has been added in order to state the meaning of the term "check" in this particular case. The comment in the brackets is thus a hint given in order to avoid translation problems and, in this example, you can therefore enter the German equivalent to the English term "Check", "Scheck", in the right-hand column of the dictionary. The example looks as follows:

Check{MeansOfPayment} Scheck{MeansOfPayment}

As all comments are inserted in the dictionary by the Maconomy Development Department, requests for new comments, changes and developments should also be given to the Development Department. Contact the Release function for further information.

### 3.7 Format of The Dictionary

#### 3.7.1 Properties

The following properties should be considered when editing the dictionary:

Lines

The order of the lines in the dictionary is not of importance. You can change the order of the lines any way you want in the dictionary.

In order to maintain a complete dictionary, you must not delete any entries in the left-hand column of the dictionary as a complete dictionary is essential to the core functionality of dynamic translation.

You must not add empty lines.

Comments

You can introduce comment lines using the symbols "##". A comment is a new line where the left-hand column contains something which is not a text from the application, e.g.,

##The translation of this word has been chosen due to ...

You can also introduce a comment on an individual line by writing something in a third column; i.e. one tab stop to the right of the second column in the dictionary.

Character Set

Be careful that the character set is maintained correctly, so that special characters such as ‰, ^ and ¸ are not converted. This may happen if you use different editors or exchange the dictionary via e-mail. If you send via e-mail, always zip the file first to avoid character conversion errors (and to reduce the file size!).

If you import the dictionary into Microsoft Excel, you should pay attention to Excel's automatic field formatting. Excel may remove leading quotes, convert single quotes to double quotes, etc. As these quotes are essential to the correct use of the terms in the application, you should therefore be very careful when importing by means of Excel. It is therefore recommended that you use a regular text editor.

If you want to use Excel anyway, the only way is to copy the dictionary from a text editor and paste it into Excel. While working, you must not save the document. When you are finished, copy the dictionary back into the text editor, and save it there.

Blanks

Be aware of leading and trailing blanks, e.g. "Customer" and "Customer" (extra space in the latter entry) are technically speaking two individual entries in the dictionary. It is therefore recommended that you systematically use the same number of leading and trailing spaces in the translations.