

MultiTerm Extract Tools User Guide

MultiTerm 2022



Legal notice

Copyright and trademark information relating to this product release.

Copyright © 2000–2020 SDL as part of the RWS Holdings Plc group of companies ("RWS Group").

SDL means SDL Limited and its subsidiaries and affiliates. All intellectual property rights contained herein are the sole and exclusive rights of SDL. All references to SDL shall mean SDL Limited and its subsidiaries and affiliates details of which can be obtained upon written request.

All rights reserved. Unless explicitly stated otherwise, all intellectual property rights including those in copyright in the content of this website and documentation are owned by or controlled for these purposes by SDL. Except as otherwise expressly permitted hereunder or in accordance with copyright legislation, the content of this site, and/or the documentation may not be copied, reproduced, republished, downloaded, posted, broadcast or transmitted in any way without the express written permission of SDL.

MultiTerm is a registered trademark of SDL. All other trademarks are the property of their respective owners. The names of other companies and products mentioned herein may be the trademarks of their respective owners. Unless stated to the contrary, no association with any other company or product is intended or should be inferred.

This product may include open source or similar third-party software, details of which can be found by clicking the following link: *"Acknowledgments"* on page 79 .

Although RWS Group takes all reasonable measures to provide accurate and comprehensive information about the product, this information is provided as-is and all warranties, conditions or other terms concerning the documentation whether express or implied by statute, common law or otherwise (including those relating to satisfactory quality and fitness for purposes) are excluded to the extent permitted by law.

To the maximum extent permitted by law, RWS Group shall not be liable in contract, tort (including negligence or breach of statutory duty) or otherwise for any loss, injury, claim liability or damage of any kind or arising out of, or in connection with, the use or performance of the Software Documentation even if such losses and/or damages were foreseen, foreseeable or known, for: (a) loss of, damage to or corruption of data, (b) economic loss, (c) loss of actual or anticipated profits, (d) loss of business revenue, (e) loss of anticipated savings, (f) loss of business, (g) loss of opportunity, (h) loss of goodwill, or (i) any indirect, special, incidental or consequential loss or damage howsoever caused.

All Third Party Software is licensed "as is." Licensor makes no warranties, express, implied, statutory or otherwise with respect to the Third Party Software, and expressly disclaims all implied warranties of non-infringement, merchantability and fitness for a particular purpose. **In no event will Licensor be liable for any damages, including loss of data, lost profits, cost of cover or other special, incidental, consequential, direct, actual, general or indirect damages arising from the use of the Third Party Software or accompanying materials, however caused and on any theory of liability. This limitation will apply even if Licensor has been advised of the possibility of such damage. The parties acknowledge that this is a reasonable allocation of risk.**

Information in this documentation, including any URL and other Internet website references, is subject to change without notice. Without limiting the rights under copyright, no part of this may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or

for any purpose, without the express written permission of RWS Group.

Contents

1	Legal notice	3
2	Using static terminology extraction	1
	Statistical extraction using MultiTerm Extract	2
3	About MultiTerm Extract	3
	Statistical extraction features in MultiTerm Extract	4
	Supported languages	4
	Supported file formats	4
	Export formats	6
	Related documentation	6
	Accessing documentation	7
4	Working with MultiTerm Extract	9
	MultiTerm Extract projects	10
	Project types	10
	Translation projects	11
	QA projects	11
	Term extraction flow for Monolingual, Bilingual, Dictionary and Translation projects	11
	Term extraction flow for QA projects	12
	Project creation prerequisites	13
	Creating projects	14
	Saving a project	27
	Importing terms into translation projects	28
	Extracting terms	28
	Extracting terms automatically	28
	Extracting terms manually	29
	Text window	30
	MultiTerm Extract Interface	31
	Term window	32
	Sorting Terms	33
	Deleting Terms	33
	Term Properties window	33
	Global operation buttons	34
	Term and translation information	34

	Definition box	35
	Note box	35
	Context information	35
	Concordance window	35
	Adding or deleting terms in the Concordance window	37
	Formatting terms in the Concordance window	37
	Validating extracted terms	39
5	Exporting terms in MultiTerm Extract	41
	Export definitions	42
	Prerequisites for term export	42
	Exporting terms	43
	Exporting using export definitions	52
	Exporting using an existing export definition	53
	Exporting using a new export definition	55
	Exporting suspect sentences in a QA project	58
	Using filters when exporting	59
	Creating filters	60
	Editing filters	63
	Removing filters	63
6	MultiTerm Extract reference	65
	Settings	66
	Preferences	66
	Project settings	67
	Add/Remove files tab	67
	Exclude tab	68
	Defining the learning settings	69
	Term Extraction tab	70
	Dictionary Compilation tab	71
	Translation tab	72
	File format settings	72
	Selecting a settings file	73
	QA Statistics	74
	Document quality	75
	Termbase quality	75
	Keyboard shortcuts	75

7	Acknowledgments	79
----------	----------------------------------	-----------

1

Using statical terminology extraction

Welcome to the MultiTerm Extract Tools Guide. This guide explains the method of statistical terminology extraction using MultiTerm Extract.

You can extract candidate terms to add to a new or existing termbase. It reduces the time and effort involved in generating a termbase by automating the process where terms are identified and entered into a central repository for review and approval. This is especially useful when creating a termbase from large volumes of documents or from new information that is constantly being updated.

Statistical extraction using MultiTerm Extract

MultiTerm Extract uses a statistical extraction method to determine the frequency of the appearance of candidate terms. It extracts term candidates and, for multilingual termbases, their probable translations found in sentences, incomplete sentence fragments and strings of code. The extracted terms are presented as a term candidate word or phrase.

After running the extraction process, MultiTerm Extract displays a term candidate list. Following review and validation, term candidates become term lists. In the MultiTerm Extract interface, you can quickly and easily validate terms. You can then use the multiple export options to incorporate extracted terms into your existing MultiTerm terminology management system. Terms can be exported to a MultiTerm termbase, MultiTerm XML format or a tab-delimited format.

MultiTerm Extract supports all languages, including those of the Far East. If you are using non-Western languages, you must have support for the relevant language installed on your computer.

2

About MultiTerm Extract

MultiTerm Extract enables you to enhance your termbase with new entries calculated on a statistical basis.

Statistical extraction features in MultiTerm Extract

MultiTerm Extract uses statistical extraction to extract term candidates and, for multilingual termbases, their probable translations and present them in a term candidate list. You can extract terms from monolingual or bilingual documents and from translation memories, and then quickly and easily validate the terms.

The various export options enable you to incorporate extracted terms into existing MultiTerm Extract termbases or to export terms to MultiTerm XML format or to tab-delimited format. You can also check for terminology consistency between the termbase and a translated file.

MultiTerm Extract allows you to:

- Create term candidate lists from monolingual documents.
- Create bilingual term candidate lists from bilingual file formats.
- Update existing multilingual termbases by creating new translations for terms already stored in MultiTerm.
- Analyze the quality of termbases and documents by comparing the terms found in documents with those stored in the termbase.
- Compile bilingual dictionaries from bilingual file formats.
- Manually extract terms from the source document(s) to complement and enhance the automatic term extraction process.
- Export extracted terms to MultiTerm, MultiTerm XML or a tab-delimited format.

Supported languages

MultiTerm Extract is fully Unicode-compliant and supports all Unicode-compliant languages. However, to render non-Western languages successfully in MultiTerm Extract, you must have support for the relevant language installed on your computer.

Supported file formats

MultiTerm Extract supports term extraction from a large range of file formats. The supported file formats depend on the type of project that you are using.

The file formats supported by the monolingual term extraction can be used in a bilingual project, but no translations are extracted. The formats can be used when you want to find source terms but you must add your own translation for any terms that are extracted.

Project	Supported File Types
Monolingual Term Extraction Project	<p>TXT - Plain text</p> <p>RTF - Rich text format</p> <p>Microsoft Office Word (*.doc)</p> <p>HTML, HTM, JSP, ASP, ASPX</p> <p>SGML, SGM, XML</p> <p>Ventura (*.txt)</p> <p>Adobe PageMaker (*.txt)</p> <p>QuarkXPress (*.qsc, *.txg, *.ttg, *.tag)</p> <p>TTX - TRADOSTag file format</p> <p>Adobe InDesign (*.isc) Microsoft Office PowerPoint (*.ppt, *.pps, *.pot)</p> <p>Microsoft Office Excel (*.xls, *.xlt)</p>
Bilingual Term Extraction Project	<p>BILINGUAL FORMATS:</p> <p>TMX - Translation memory exchange format</p> <p>TMW - Translator's Workbench</p> <p>Translator's Workbench</p> <p>TXT format (*.txt) TTX - TRADOSTag files</p> <p>MONOLINGUAL FORMATS:</p> <p>TXT - Plain text</p> <p>RTF - Rich text format</p> <p>Microsoft Office Word (*.doc)</p> <p>HTML, HTM, JSP, ASP, ASPX</p> <p>SGML, SGM, XML</p> <p>Ventura (*.txt)</p> <p>Adobe PageMaker (*.txt)</p> <p>QuarkXPress (*.qsc, *.txg, *.ttg, *.tag)</p> <p>Translator's Workbench RTF format (*.rtf)</p> <p>Adobe InDesign (*.isc) Microsoft Office PowerPoint (*.ppt, *.pps, *.pot)</p> <p>Microsoft Office Excel (*.xls, *.xlt)</p>

Project	Supported File Types
Dictionary Compilation Project	TMX - Translation memory exchange format TMW - Translator's Workbench Translator's Workbench TXT format (*.txt) Translator's Workbench RTF format (*.rtf) TTX - TRADOStag files
Translation Project	TMX - Translation memory exchange format TMW - Translator's Workbench Translator's Workbench TXT format (*.txt) Translator's Workbench RTF format (*.rtf) TTX - TRADOStag files
QA Project	TMX - Translation memory exchange format TMW - Translator's Workbench Translator's Workbench TXT format (*.txt) Translator's Workbench RTF format (*.rtf) TTX - TRADOStag files

Export formats

You can export extracted terms directly to a MultiTerm termbase, a MultiTerm XML export file or a tab-delimited text file.

Related documentation

The following documentation may be useful when working with MultiTerm Extract:

- There is a MultiTerm Extract tutorial installed with the product. The tutorial is accessible from the **Start** menu.
- There is a MultiTerm online help and a Trados Studio online help.

Accessing documentation

All guides are available in PDF format in the *docs* subfolder of your product DVD, and in the *Doc* subfolder of your installation.

MultiTerm Extract is available for users of MultiTerm. Contact your RWS sales representative for details.

3

Working with MultiTerm Extract

MultiTerm Extract enables you to create projects, extract terms, import terms and validate them.

MultiTerm Extract projects

MultiTerm Extract projects allow you to extract terms from existing files. Those terms can then be reviewed, validated and exported to a termbase or other available formats to assist in translation.

Project types

There are five types of project in MultiTerm Extract:

- **Monolingual Term Extraction Project**
- **Bilingual Term Extraction Project**
- **Dictionary Compilation Project**
- **Translation Project**
- **QA Project**

Use the New Project Wizard in MultiTerm Extract to create any of the projects.

Note: MultiTerm Extract support a wide range of file formats. These formats vary depending on which project is created. See “Supported file formats” on page 4.

Project	Purpose
Monolingual Term Extraction Project	Extracts terminology from a text in one language.
Bilingual Term Extraction Project	Extracts terminology from monolingual formats. Extracts and translates from bilingual formats.
Dictionary Compilation Project	Extracts a dictionary from an existing translation memory file or a bilingual file which has been translated using Translator's Workbench.
QA Project	Analyzes and allows you to improve the quality of termbases and documents.
Translation Project	Provides suggestions from existing texts and allows you to enter translations to a termbase.

Translation projects

A **Translation Project** updates an existing termbase in MultiTerm by creating new translations in one or more languages for corresponding terms already stored in the termbase. You will need a text in a supported file format and the MultiTerm termbase.

For example, if your termbase contains English and Spanish indexes, and already has the English term "Door", and your translated file contains the equivalent term in Spanish, the **Translation Project** can update the termbase automatically with this term.

QA projects

A **QA Project** analyzes and improves the quality of termbases and documents by comparing the terms found in documents with those stored in the termbase.

A **QA Project** allows you to:

- Monitor the usage of terms found in project files and the project termbase and their respective translations. This allows you to check that the terms used in the document are those that are contained in the termbase.
- Evaluate the translation quality of documents on the basis of the stored terminology.

Each **QA Project** provides a QA report. A QA report provides statistical information on the terms in project files and existing terms from the MultiTerm termbase in the project.

Term extraction flow for Monolingual, Bilingual, Dictionary and Translation projects

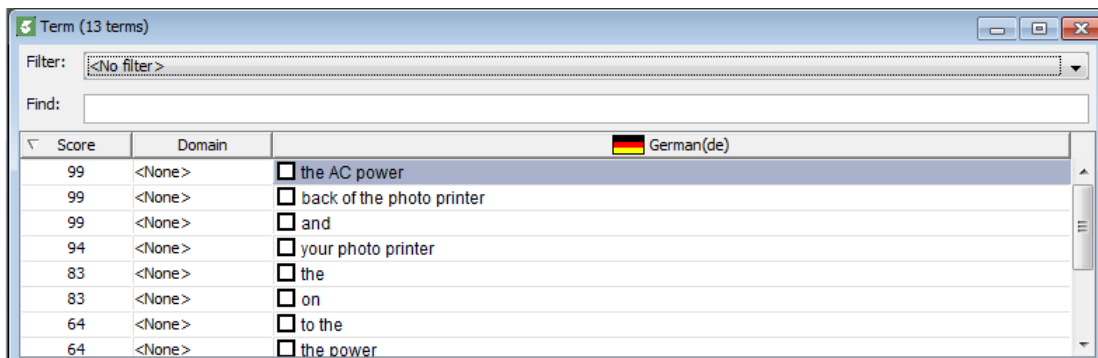
All MultiTerm Extract projects are created using the New Project Wizard. This procedure varies depending on the type of project you are creating.

About this task

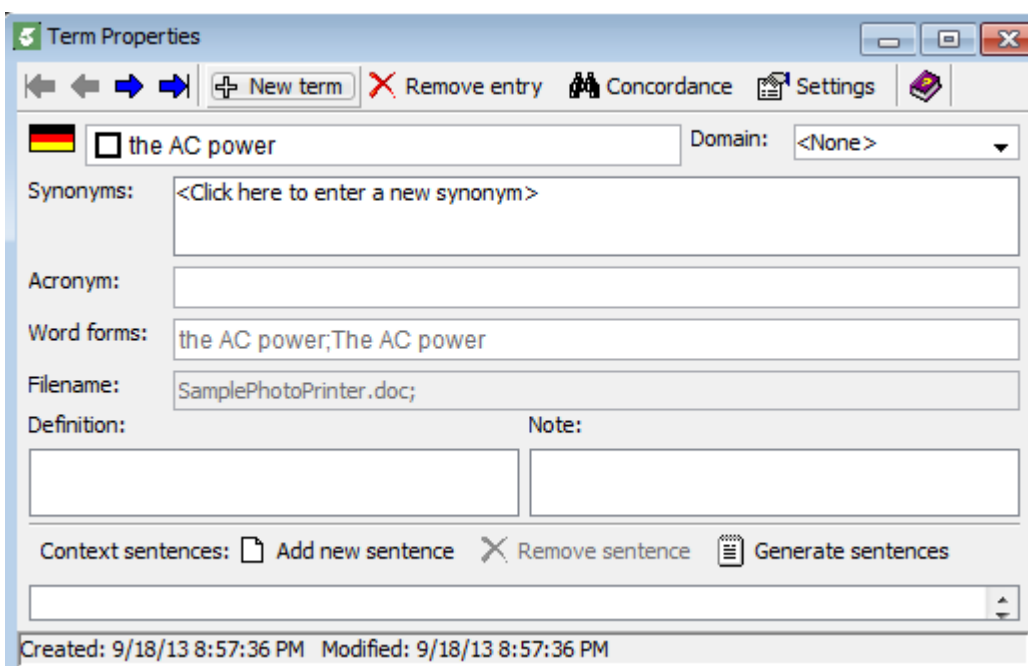
Displayed below is an overview of creating a **Monolingual Term Extraction Project**, **Bilingual Term Extraction Project**, **Dictionary Compilation Project** or **Translation Project**. Each step is explained in more detail later in this guide.

Procedure

1. Create a new MultiTerm Extract project by selecting **File > New Project** from the menu bar. The New Project Wizard allows you to select the project type, add files, customize settings and specify stopword lists. See *"Creating projects"* on page 14.
2. Start the term extraction process by selecting **Project > Process** from the menu bar. See *"Extracting terms"* on page 28.
3. View the extracted term list in the Term window. For **Translation Projects**, the translations for the source terms may be located in either in the input files or in the MultiTerm termbase. See *"Term window"* on page 32.



- In the **Term** properties window you can check each word, and for **Translation Projects**, you can select a term and add translations.



- Validate terms using the Concordance window for reference. See "Validating extracted terms" on page 39.
- Export validated terms by selecting **File > Export** the menu bar and using the Export Wizard.
See "Exporting terms in MultiTerm Extract" on page 41.

Term extraction flow for QA projects

You can check documents and termbases using a **QA Project**.

Procedure

1. Create a **QA Project** using the New Project Wizard. See *“Creating projects ”* on page 14.
2. Extract the terms. See *“Extracting terms ”* on page 28.
3. Check the QA statistics. See *“QA Statistics ”* on page 74.
4. Process the files. See *“Settings ”* on page 66.
5. View the QA statistics. See *“QA Statistics ”* on page 74.
6. Export any suspect sentences if necessary and edit them. See *“Exporting suspect sentences in a QA Project ”* on page 58.
7. Process the project and check the QA statistics again.

Project creation prerequisites

Ensure that all prerequisites are observed before you start creating projects. All MultiTerm Extract projects are created using the New Project Wizard.

Ensure that you are familiar with the following information:

- MultiTerm Server computer details - These details determine the MultiTerm Server computer name that provides access to the termbases with which you want to work.
- MultiTerm Server connection type - Find out whether your computer and the MultiTerm Server computer are linked by a standard LAN or a MultiTerm Anywhere connection. A standard LAN connection applies when both computers belong to the same physical domain. A MultiTerm Anywhere connection applies when the two computers belong to separate physical domains.
- MultiTerm Server login details - This information determines the user name and password for your MultiTerm Server login.
- The name and location of the local termbase you intend to use in your project. Know the name and location before you open the New Project Wizard. You have exclusive access and unlimited user rights in all local termbases, and no login details are required. Contact your MultiTerm administrator for these details and for information about your termbase user rights. You must have sufficient rights to work with a remote termbase from MultiTerm Extract.

Note: When you connect to a MultiTerm Server, the license restrictions as defined on the server are applied, so you might not be able to open the termbase because no free viewing seats are available on the server. In this case, wait until an appropriate seat becomes available and inform your MultiTerm administrator.

Creating projects

All MultiTerm Extract projects are created using the New Project Wizard.

Before you begin

Ensure that all “prerequisites ” on page 13 are observed.

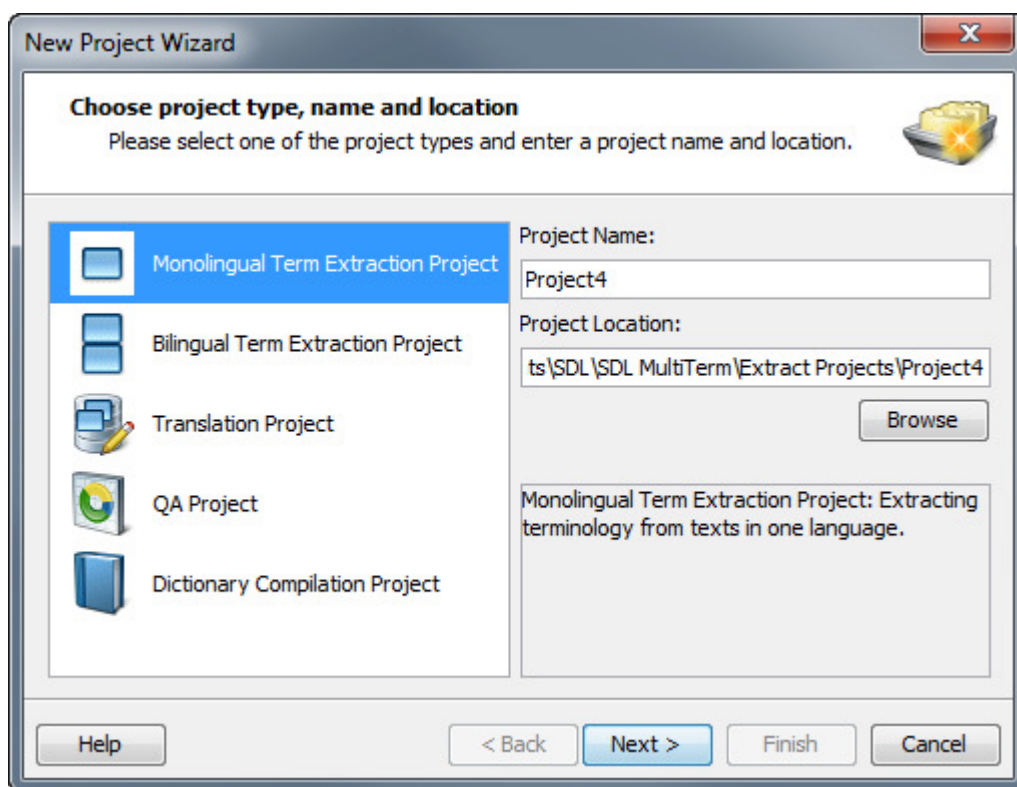
About this task

The example shows you how to create all of the different project types in MultiTerm Extract. The procedure for creating a **Monolingual Term Extraction Project**, **Bilingual Term Extraction Project** and **Dictionary Compilation Project** is similar.

Note: If you are extracting terms from HTML, SGML, XML, ASP or JSP formats, see “File format settings ” on page 72.

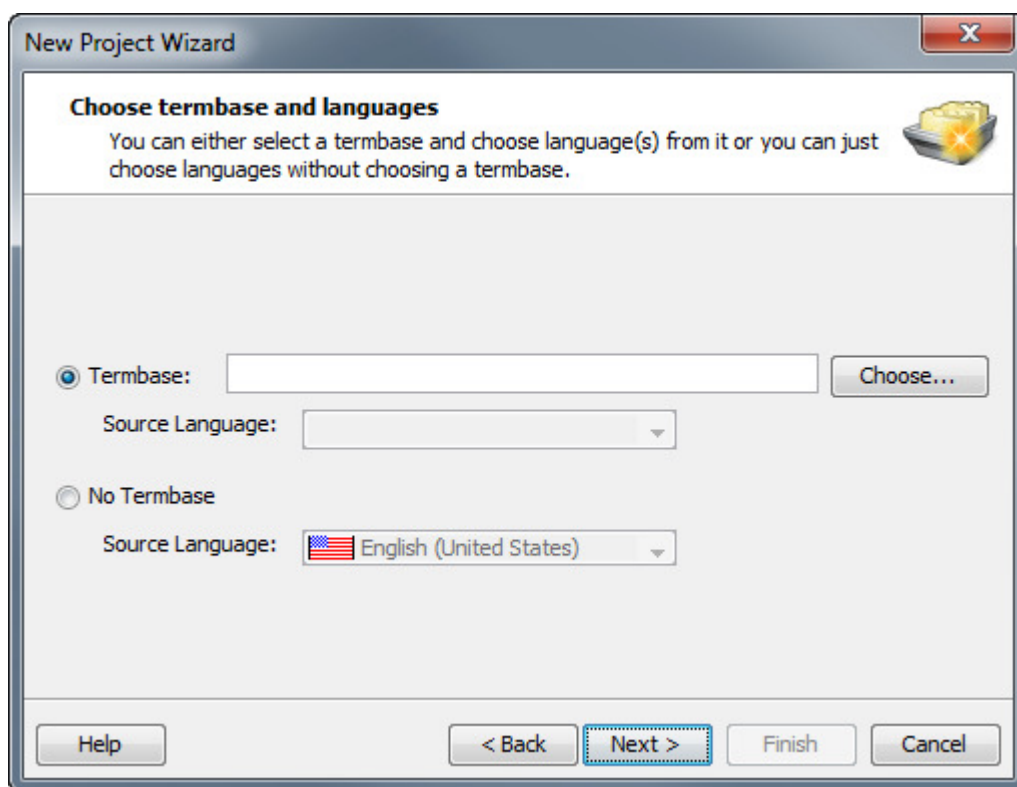
Procedure

1. Select **File > New Project** from the menu bar.



2. In the New Project Wizard, consult the **Choose project type, name and location** page.
3. Select your project type:
 - **Monolingual Term Extraction Project** - It contains extracted terms from one or more single-language texts.
 - **Bilingual Term Extraction Project** - It contains extracted source and target terms from bilingual files (TTX, TMW, TMX). You can also use WinAlign export files and add

- monolingual files to bilingual term extraction projects.
- **Translation Project** - It is used to update an existing MultiTerm termbase by offering new translations for terms already stored in the termbase and by adding new term pairs.
 - **QA Project** - It helps you monitor the use of terms in a document and a termbase, and the way they are translated. It allows you to evaluate the translation quality of documents and termbases.
 - **Dictionary Compilation Project** - It contains an alphabetically-sorted dictionary compiled from bilingual files (TTX, TMW, TMX). It includes source language terms as well as their target language translations.
4. Complete the following information:
 - a. Enter a name for the project in the **Project Name** box.
 - b. Select **Browse** to select a location for the MultiTerm Extract project. By default MultiTerm Extract places all projects in a **Projects** folder within the MultiTerm Extract installation folder.
 5. Select **Next**, and then, on the Choose termbase and languages page, select the project languages and optionally, a project termbase.



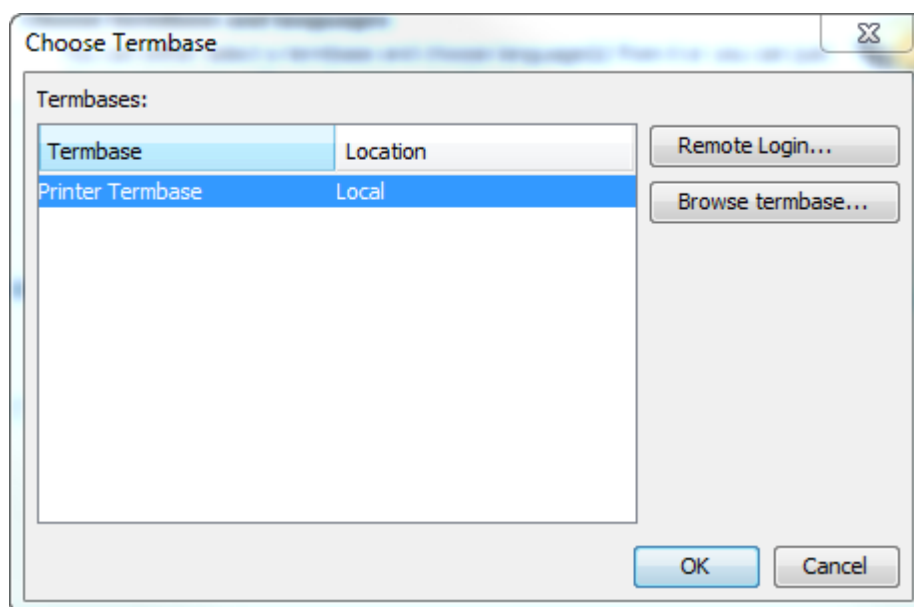
Selecting a project termbase enables you to perform the following actions:

- You can exclude the terms in the termbase, from the extraction process. This means that known terms are ignored by MultiTerm Extract.
- You can export the terms from your project into the project termbase, when the project is created and the terms have been extracted and validated. See “Exporting terms in MultiTerm Extract ” on page 41.

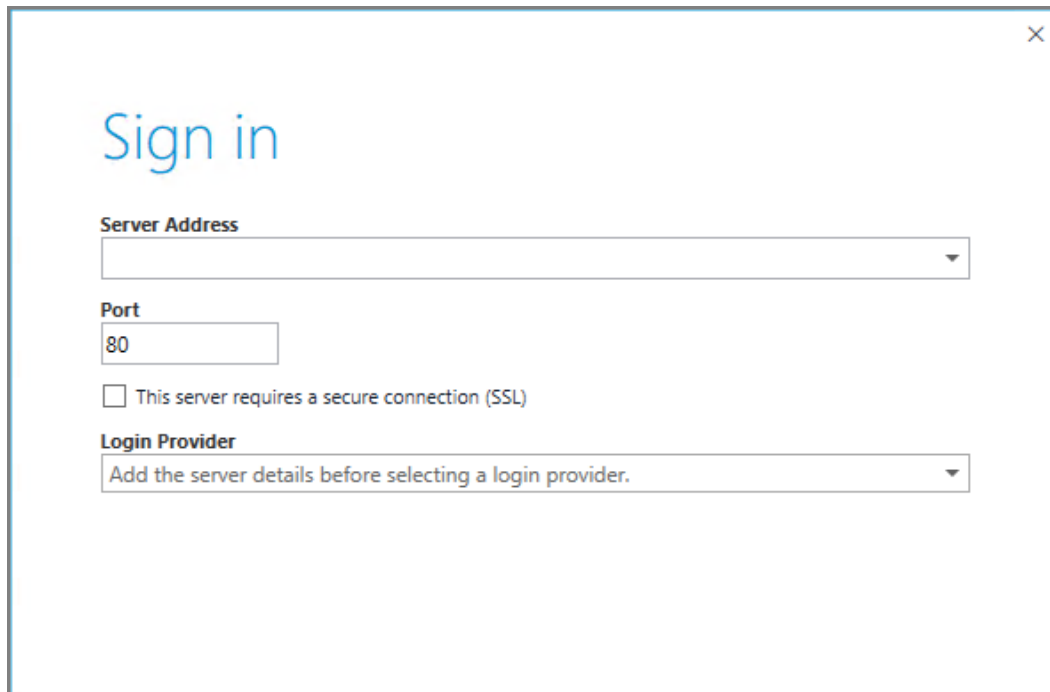
6. If you do not want to add a termbase to your project, select **No Termbase** and then complete the **Source Language** and **Target Language** boxes by selecting the project source and target languages. Only the languages supported by your operating system are available for selection. The **Target Language** box is not displayed if you are creating a monolingual project. Now go to step 8.

Note: All **Translation Projects** and **QA Projects** must have a termbase in the project. For this reason, the **No Termbase** option for these projects is not available.

7. If you want to add a termbase to your project, select **Termbase** and select **Choose**. In the Choose Termbase dialog, consult the list of the termbases you have used previously.
 - To use a server termbase, select the termbase and select **OK**. If the termbase is server-based, the Connect to MultiTerm Server dialog is displayed. Enter your login name and password for the server and select **OK**. Go to step 7.



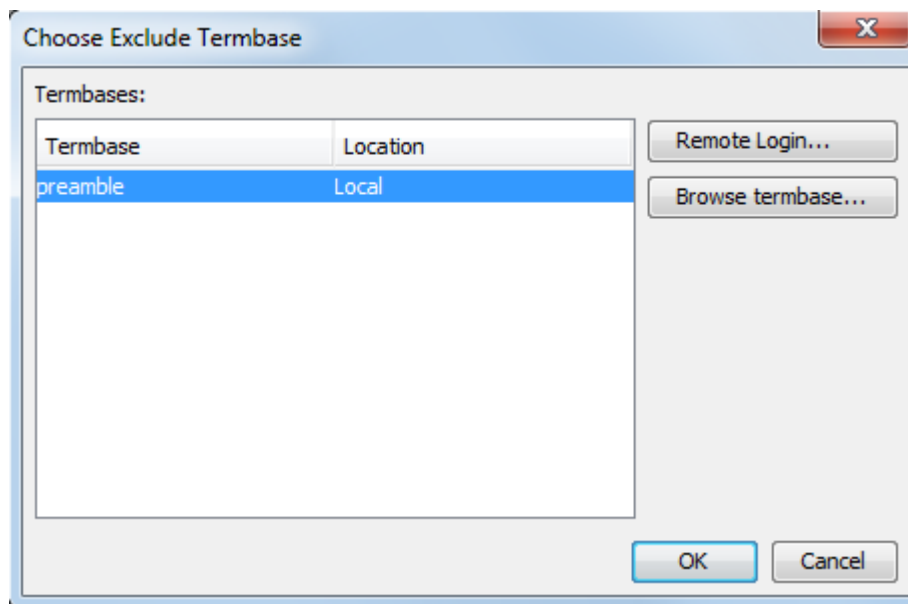
- To use a local termbase that is not in the list, select **Browse termbase**. In the Open Termbase dialog, navigate to the required termbase, select the termbase and select **Open**. The termbase is added to the **Termbases** box. Select the termbase and select **OK**. Go to step 8.
- To use a server-based termbase that is not in the list, select **Remote login**. The Login to MultiTerm Server dialog is displayed.



A "Sign in" dialog box with a close button (X) in the top right corner. The title "Sign in" is in blue. It contains the following fields:

- Server Address:** A dropdown menu.
- Port:** A text box containing "80".
- ☐ This server requires a secure connection (SSL)
- Login Provider:** A dropdown menu with the text "Add the server details before selecting a login provider."

Note: MultiTerm server login details are available from your MultiTerm administrator. If you intend to export terminology directly to the remote termbase, make sure that the login you receive provides you with sufficient termbase access rights.



A "Choose Exclude Termbase" dialog box with a close button (X) in the top right corner. It contains a table of termbases and two buttons on the right.

Termbase	Location
preamble	Local

Buttons on the right: Remote Login..., Browse termbase...

Buttons at the bottom: OK, Cancel

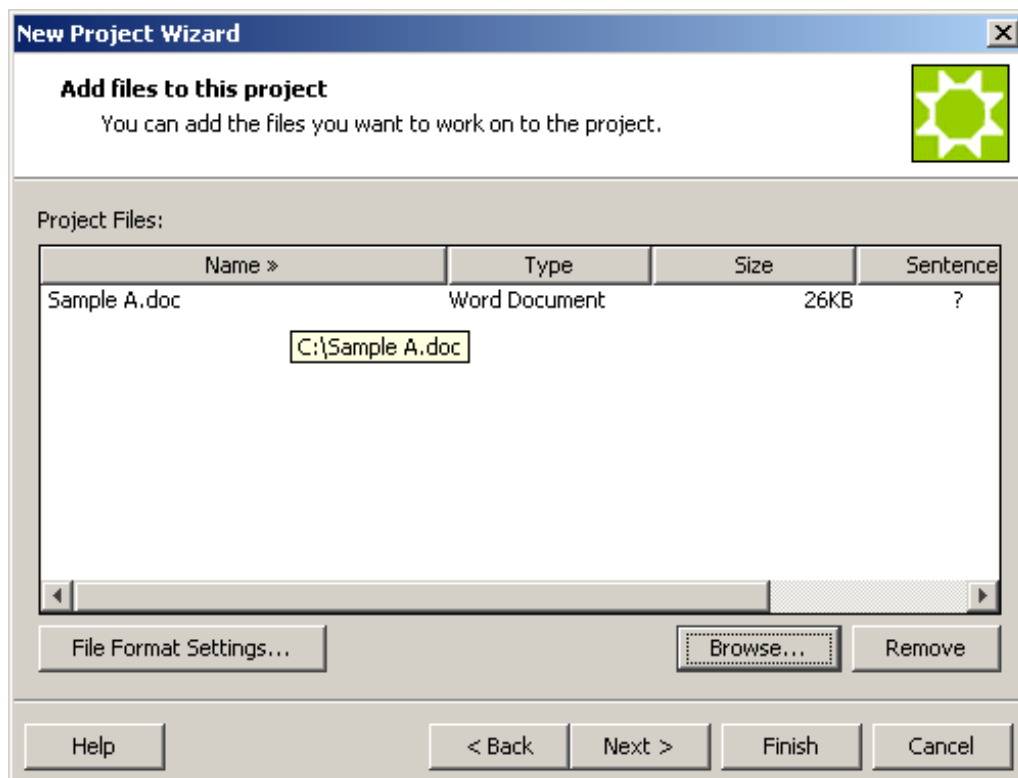
- Enter the name of the **MultiTerm Server computer**.
- Select **Standard LAN** or **MultiTerm Anywhere**, depending on the type of connection that exists between your computer and the MultiTerm Server computer. If both computers belong to the same physical domain, choose **Standard LAN**. This is the

connection that is generally used. If both computers belong to separate physical domains, choose **MultiTerm Anywhere**.

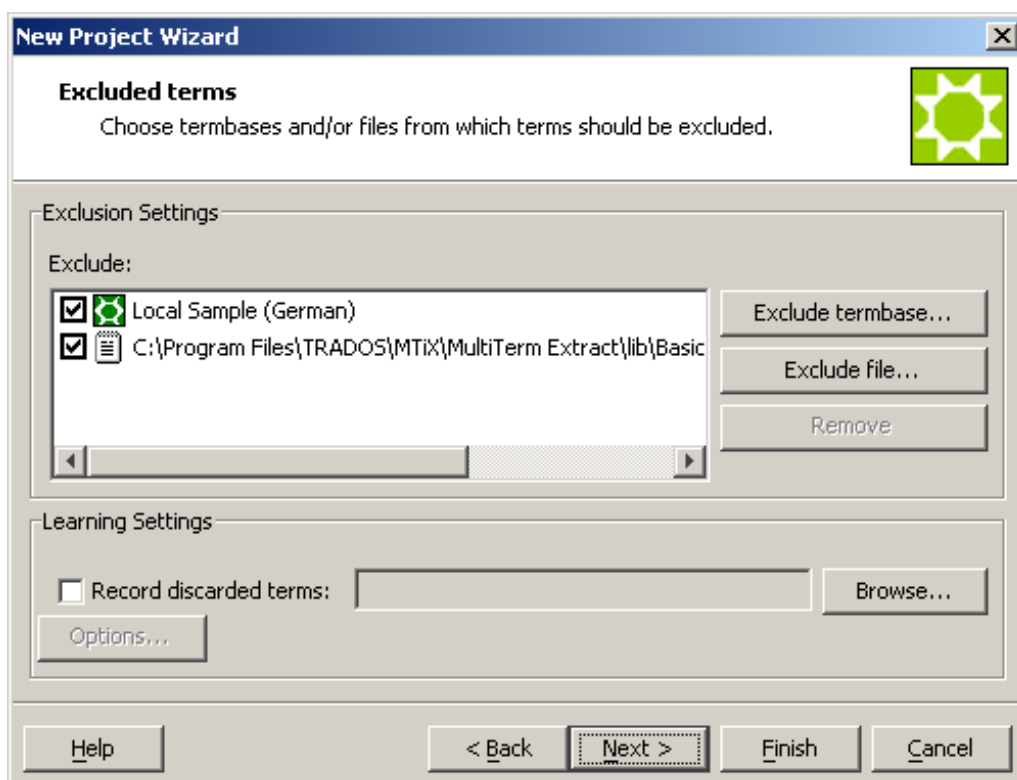
- If you selected **MultiTerm Anywhere** and your organization uses a proxy server, select **Use proxy server within your LAN** and complete the **Address** and **Port** boxes.
- Select **OK** to save the server connection details and close the Connect to MultiTerm Server dialog box. If the login details you provided were correct, the termbases available on the server are added to the list in the Choose Termbase dialog box.
- Select the required termbase from the list and click **OK** to close the Choose Termbase dialog box.

Note: You only need to define the remote termbase connection settings for your project once. Thereafter, each time you open the project, the Connect to MultiTerm Server dialog box is automatically displayed enabling you to log in and access the relevant termbase in a more direct fashion.

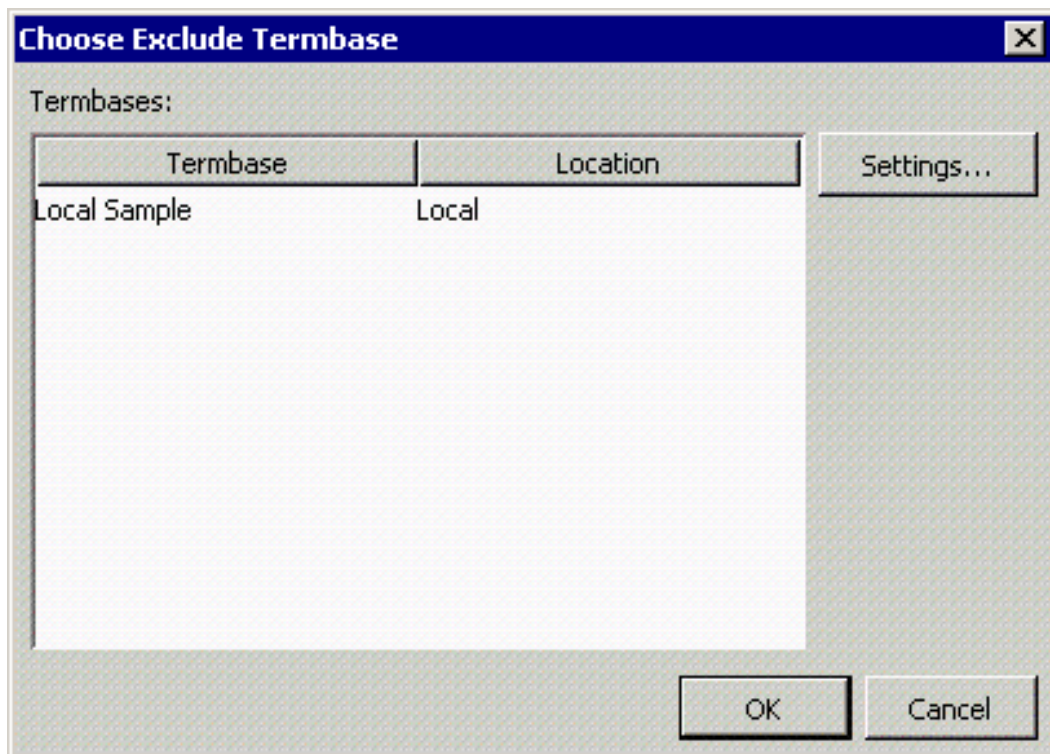
8. Under **Termbase**, complete the **Source Language** and **Target Language** boxes by selecting the project source and target languages. Only the languages supported by your operating system are available for selection. The **Target Language** box is not displayed if you are creating a monolingual project.
9. Select **Next**, and on the **Add files to this project** page is displayed, select the files to be searched for potential terminology. Select **Browse** to open the Add dialog. Browse to the location of the files you want to add to the project. Select a file or a group of files and select **OK**. The selected file or files are added to the **Project Files** list. Continue adding files until the list is complete.



- To specify a settings file (*.ini) for the files you have selected, select **File Format Settings**. See “File format settings ” on page 72.
 - To create the project using the default settings, select **Finish**.
 - To change the default settings before creating the project, go to step 10.
10. Select **Next**. The Excluded terms page is displayed. Use this page to define the exclusion and learning settings for your project. This page is not displayed for **Translation Projects** and **QA Projects**. **Exclusion Settings** - during the extraction process, MultiTerm Extract ignores any terms that already exist in the termbase and/or file that is specified under **Exclusion Settings**. **Learning Settings** - during the extraction process, MultiTerm Extract records any terms that you manually reject in a dedicated database. MultiTerm Extract learns to automatically ignore these unwanted terms as extraction continues.



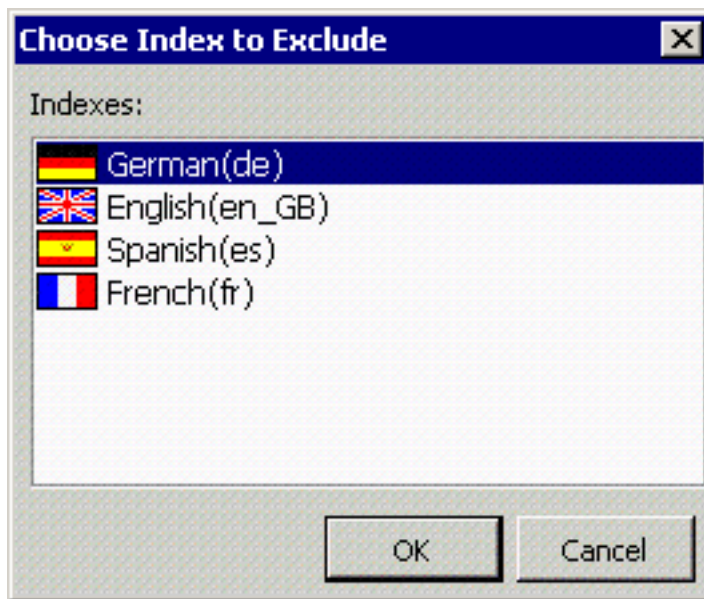
11. Specify **Exclusion Settings**:
- a. Select **Exclude termbase**.



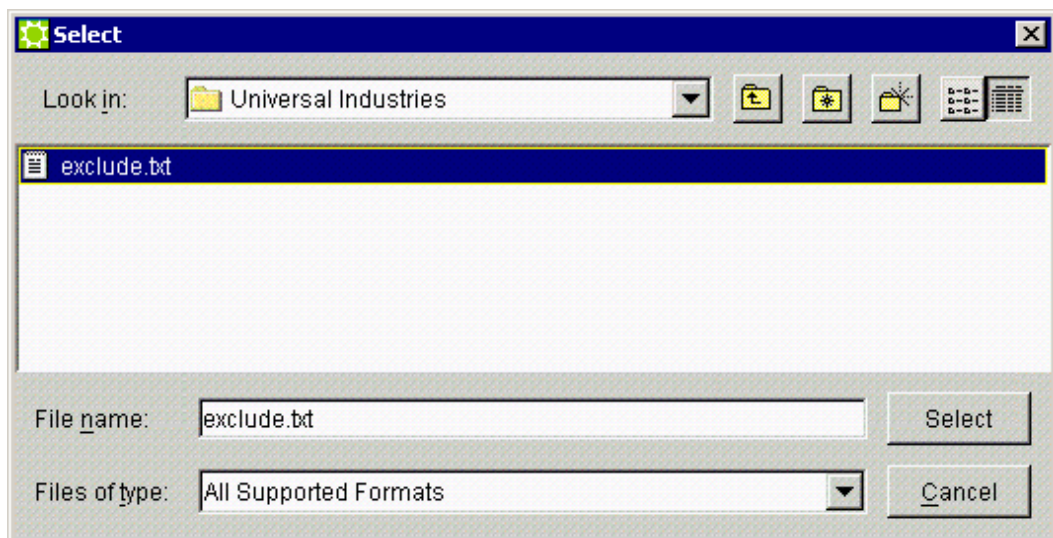
- b. In the Choose Exclude Termbase dialog, select the termbase whose terms you want to exclude from the term extraction process.
- To select an already known termbase, select the termbase in the list and select **OK**. The Choose Index to Exclude dialog is displayed.
 - To select a local termbase, select the **Browse termbase** button.
 - To select a remote termbase, select **Remote Login** to open the Server Login dialog. For more information about termbase connection settings, go to step 6. After returning to the Choose Exclude Termbase dialog box, select the termbase and click **OK**. The Choose Index to Exclude dialog box is displayed.

Note: If you selected a project termbase already in step 5, this is automatically displayed under **Exclusion Settings**.

- c. Complete the Choose Languages to Exclude dialog box.

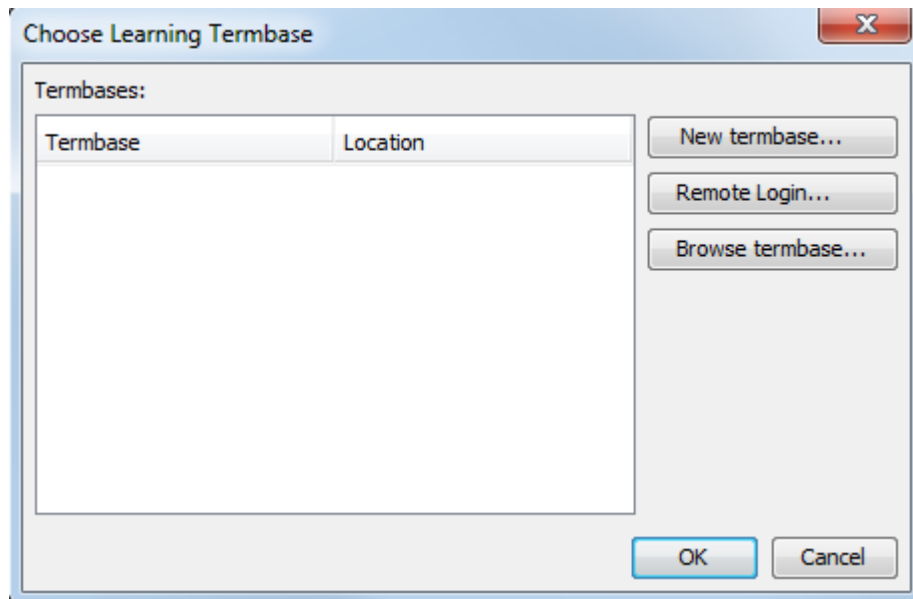


- d. Select the source index to which MultiTerm Extract should refer when checking for terms to exclude from the term extraction process.
- e. Click **OK** to return to the Excluded terms page.
- f. On the Excluded terms page of the New Project Wizard, click **Exclude** file to specify lists of terms you do not want to include in the extraction process. The Select dialog box is displayed.



- g. Browse to the exclude list and choose the list. MultiTerm Extract comes with basic vocabulary lists for certain European languages. If there is a basic vocabulary list available for your source language, this is automatically displayed.
 - h. Click **Select** to return to the Excluded terms page.
12. Specify **Learning Settings**
- a. On the Excluded terms page of the New Project Wizard, select the **Record discarded** terms check box to choose a learning database.

- b. Click **Browse** to select the database or to create a new one and the Choose Learning Termbase is displayed.



- c. If you want to select a remote termbase, click **Remote Login** to open the Server Login dialog box. For more information about termbase connection settings, go to step 6.
 - d. If you want to select a local termbase, Click the **Browse termbase** button.
 - e. To create a new termbase, click **New termbase** and the Create Learning Termbase dialog box is displayed. Enter a **Termbase name** and select the termbase languages. Click **Create** and **OK** to return to the Excluded terms page.
13. Click **Next**. Depending on the type of project you are creating, one of three pages is displayed. Use these pages to customize the MultiTerm Extract settings.
 - For **Monolingual Term Extraction Projects** and **Bilingual Term Extraction Projects**, go to step 11.
 - For **Translation Projects** and **QA Projects**, go to step 12.
 - For **Dictionary Compilation Projects**, go to step 13.
 14. For **Monolingual Term Extraction Projects** and **Bilingual Term Extraction Projects**, the Term extraction settings page is displayed. Use this page to customize the MultiTerm Extract term extraction settings:

New Project Wizard

Term extraction settings
You can change the settings as required.

Minimum term length: words

Maximum term length: words


☒ Maximum number of extracted terms:


Silence/noise ratio:

Noise Silence

- In the **Minimum term length** box, specify the minimum number of words required to form a term candidate. The default setting is 1.
- In the **Maximum term length** box, specify the maximum number of words that a term candidate may have. The default setting is 10.
- Select **Maximum number of extracted terms** to set the maximum number of term candidates that MultiTerm Extract will extract. The default setting is 100.
- Set the **Silence/noise ration**. The higher the silence ratio, the fewer term candidates are extracted. However, these term candidates are generally of a higher quality. The higher the noise ratio, the more term candidates are extracted. However, it is likely that these will include a number of lower quality candidates.
- Select **Stopword Lists** to set the language-specific list(s) containing articles, pronouns and other items that are to be excluded from the extraction process.

Stopword Lists

☒  Stopword list for English(en_GB):

☒  Stopword list for French(fr):

15. For **Translation Projects** and **QA Projects**, the Term Recognition Options page is displayed. The options available are different depending on if a **Translation Project** or **QA Project** was selected. Use these pages to customize the MultiTerm Extract term recognition settings. The following page is the **Term Recognition Options** for a **Translation Project**.

- Select **Only show terms in project termbase that are found in documents** to only include terms from the termbase that are displayed in the project file (**Translation Projects** only).
 - Select **Show all terms in project termbase** to include all terms in the project termbase (**Translation Projects** only).
 - The following page displays the **Term Recognition Options** for a **QA Project**. The options available on this page are relevant to both **Translation Projects** and **QA Projects**.
 - Use the **Minimum Match Value %** box to specify a value below which terms will not be included in the project.
 - Use the **Search-Depth (10-999)** box to specify the number of terms to search at a time. When scanning source segments for terminology, MultiTerm Extract evaluates not only single words but also multiple word units, trying to find similar terms in the current termbase. The search depth value defines the number of fuzzy matches MultiTerm Extract should return. Increasing the **Search-Depth** value slows down terminology recognition. You can set it to any value between 10 and 999; however, high values are only necessary if you are working with large terminology databases. The default **Search-Depth** setting is 20 (matches) and in most cases this should produce satisfactory results.
16. For **Dictionary Compilation Projects**, the Dictionary compilation settings page is

displayed. Use this page to customize the MultiTerm Extract dictionary compilation settings:

New Project Wizard

Dictionary compilation settings
You can change the settings as required.

Algorithm

Minimum word frequency:

☐ Maximum word frequency:

☒ Maximum number of translations:

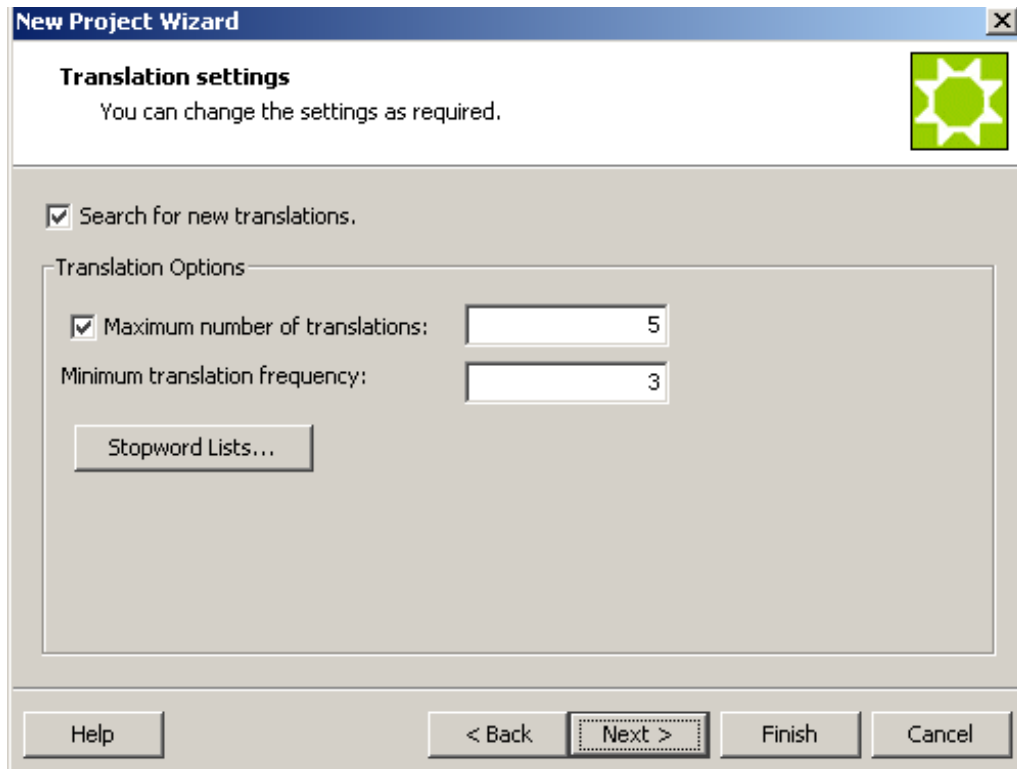
Minimum translation frequency:

☐ Maximum translation frequency:

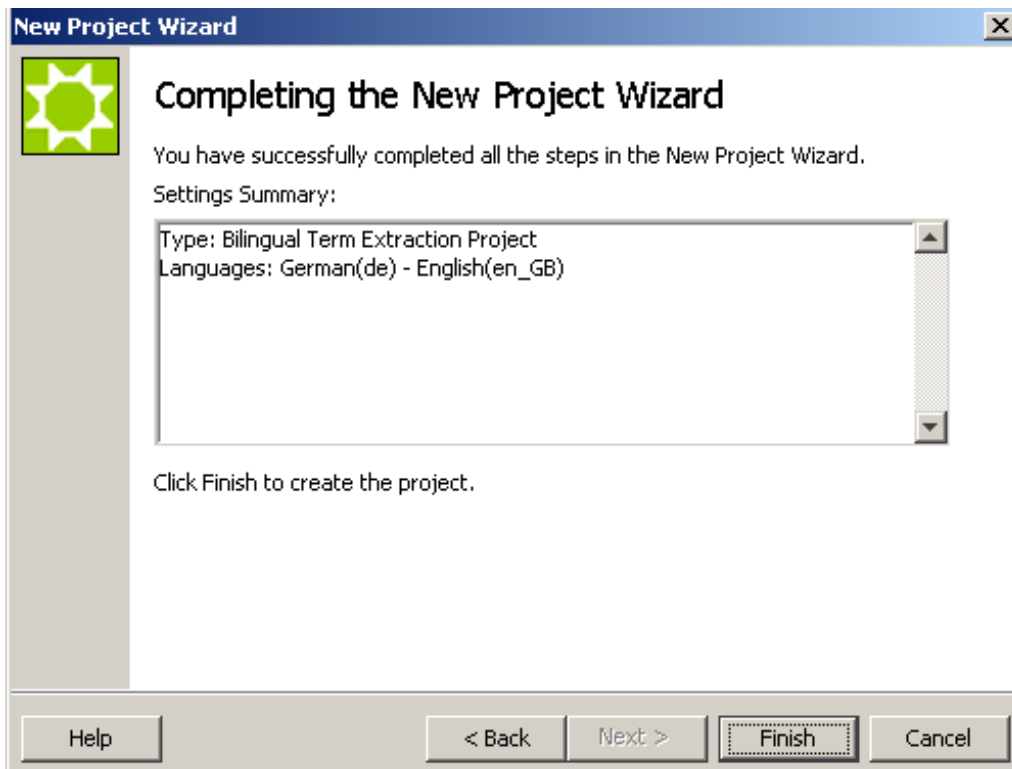
[Stopword Lists...](#)

[Help](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

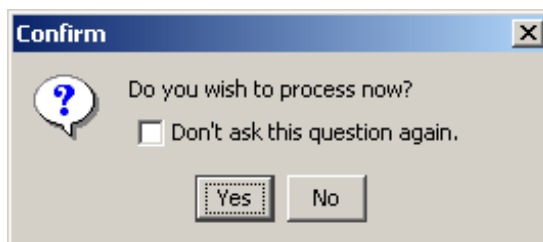
- a. In the **Minimum word frequency** box, specify the minimum number of times a term and its translation must be shown in a text before being added to the term candidate list. The default setting is 3.
 - b. Select the **Maximum word frequency** checkbox to specify the maximum number of times a term and its translation can be shown in a text before being excluded from the term candidate list. The default setting is 20.
 - c. Select the **Maximum number of translations** checkbox to specify the maximum number of possible translations that MultiTerm Extract will extract for a given term. This option is active by default and the default setting is 5.
 - d. In the **Minimum translation frequency** box, specify the minimum number of times a term must be translated by its target term in order for the target term to be added to the term candidate list. The default setting is 3.
 - e. Select the **Maximum translation frequency** checkbox to specify the maximum number of times a term may be translated by its target term before the target term is excluded from the term candidate list. The default setting is 20.
 - f. Select **Stopword Lists** to select the language-specific list(s) containing articles, pronouns and other items that are to be excluded from the extraction process.
17. Select **Next**. For **Bilingual Term Extraction Projects** and **Translation Projects**, the Translation settings page is displayed. Use this page to customize the MultiTerm Extract translation settings.



- a. Select the **Search for new translations** checkbox to enable MultiTerm Extract to extract translations and to specify the **Translation Options**.
 - b. Select the **Maximum number of translations** checkbox to set the maximum number of possible translations that MultiTerm Extract will extract for a given term. By default, this checkbox is selected and the default setting is 5.
 - c. In the **Minimum translation frequency** box, specify the minimum number of times a term must be translated by a certain target term for the target term to be added to the term candidate list. The default setting is 3.
 - d. Select **Stopword Lists** to set the language-specific list(s) containing articles, pronouns and other items that are to be excluded from the extraction process.
18. Select **Next**. The Completing the New Project Wizard page is displayed. Use this page to review the settings you specified for the created project.



19. Select **Finish**. In the MultiTerm Extract Confirm dialog:



- Select **Yes** to start processing the project.
- Select **No** to return to the MultiTerm Extract interface.

Saving a project

Once a project is created, we recommend saving changes to your MultiTerm Extract project regularly.

There are three methods to save changes to your project:

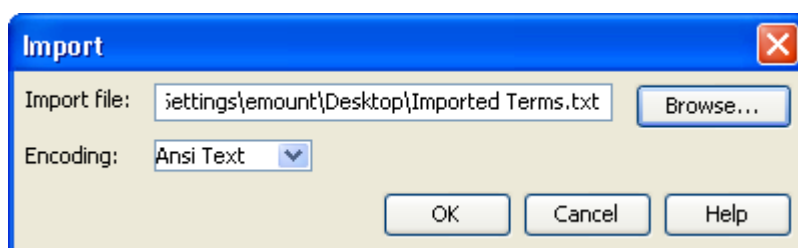
- Select **File > Save Project** or **File > Save Project As** from the menu bar.
- Use the [Ctrl]+[S] keyboard combination.
- Select **Save Project** on the MultiTerm Extract file toolbar.

Importing terms into translation projects

You can add external terms to your MultiTerm Extract **Translation Project**. The process consists of importing terms from a text file.

Procedure

1. Select **Import** from the **File** menu.



2. In the Import dialog, specify the name and location of the file from which you want to import terms in the **Import file** box, or select **Browse** to locate the file.
3. Specify the type of encoding in the file from the **Encoding** drop-down list. The available encoding depends on the source language selected for the project. For example, you may have a choice of ANSI, Unicode or UTF8 text.
4. Select **OK** to begin the import.
5. Consult the progress bar in the Import dialog. When the import process is complete, select **OK** to return to MultiTerm Extract.

Extracting terms

After a project is created, the next step is to extract the terms from the files you added during the project creation. Those terms are then added to a candidate term list in the project, for review and validation. Terms can be automatically or manually extracted from your project files.

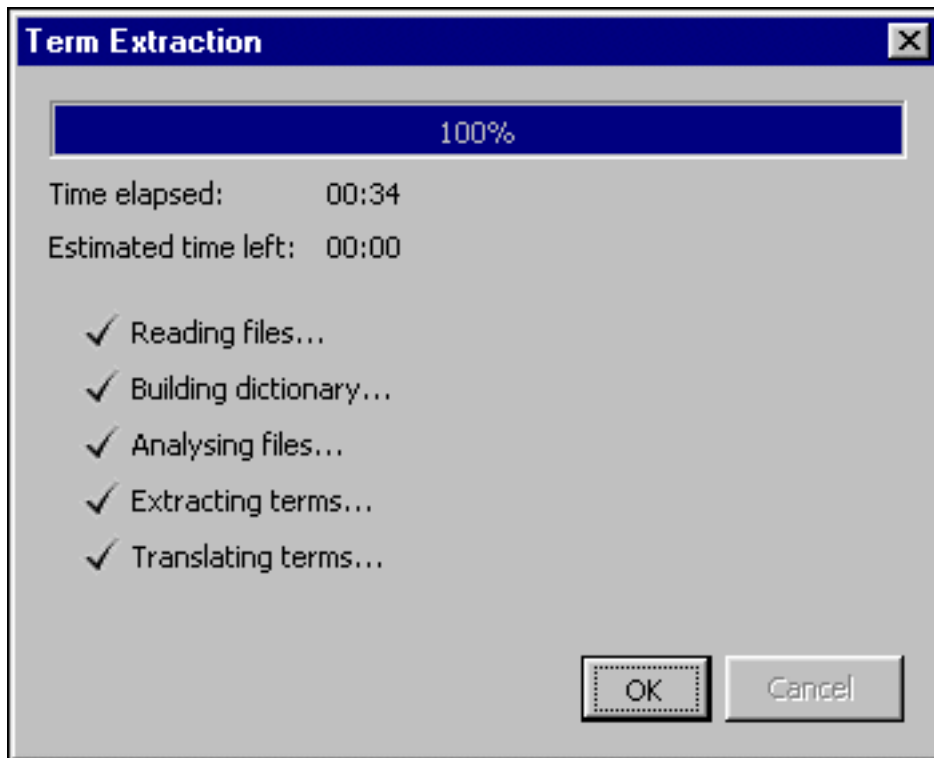
Extracting terms automatically

There are two ways of starting the automatic term extraction process:

- MultiTerm Extract prompts you to start the process after you add files to a project.
- Select **Project > Process** from the menu bar. You can also press [F7].

Note: The **Process** option is enabled after you create a new, or open an existing, MultiTerm Extract project. The option is unavailable if no MultiTerm Extract project is open or if no files have been added to the project.

The Term Extraction dialog is displayed. A progress bar indicates the completion of the extraction process. The displayed actions performed, for example, *Translating terms* and *Gathering QA* statistics vary depending on the chosen project type.



Once the progress bar has reached 100%, select **OK** to view the extracted terms in MultiTerm Extract.

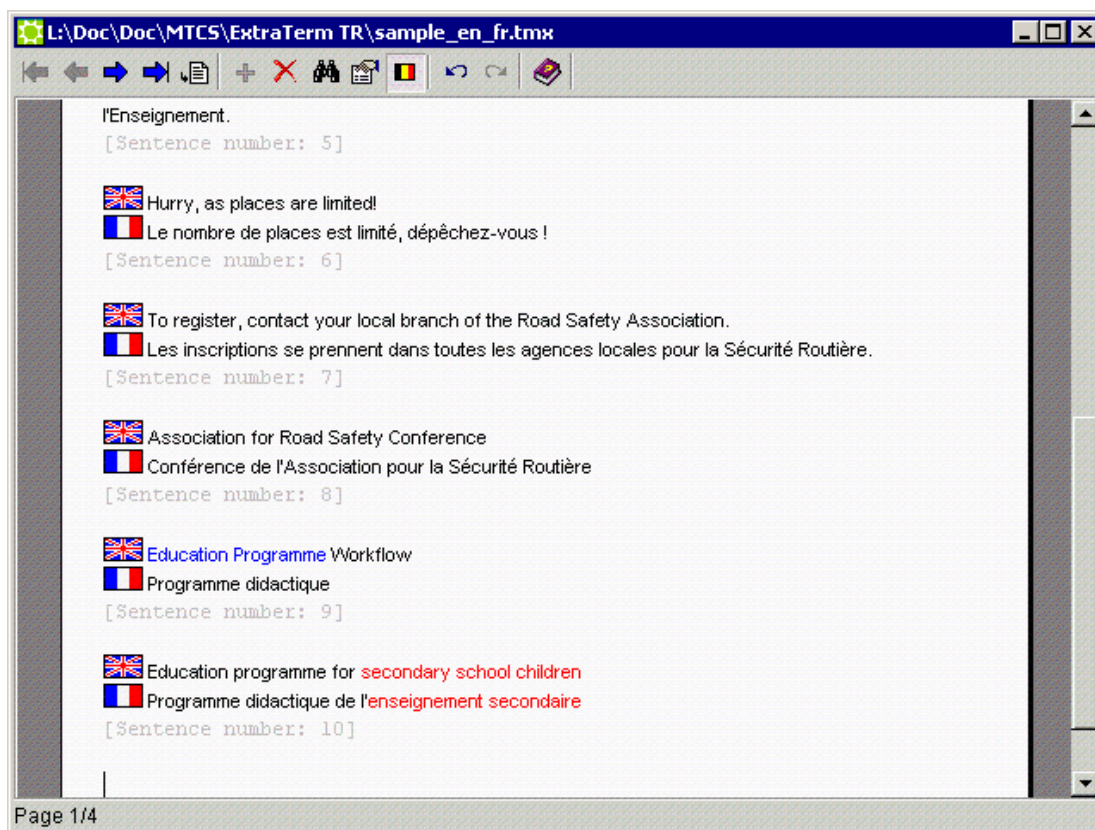
Extracting terms manually

About this task

MultiTerm Extract allows you to add more terms to the term candidate list by manually extracting terms from a document.

Procedure

1. Open your MultiTerm Extract project and select the source and target languages.
2. Select **Project > Settings** from the menu bar to open the Project Settings dialog.
3. On the **Add/Remove Files** tab, select **Browse** to add the files from which to extract terms.
4. Select **OK** to close the dialog.
5. Select **view > Text Windows** from the menu bar and select the document to display. The document opens in a text window, as shown below.



6. Newly extracted terms and translations are formatted in red text by default. Existing terms and translations are formatted by default in green text by default. MultiTerm Extract assigns a line number to each sentence in the file. To add terms manually, select the text to add and do one of the following:
- Select the text in the text window and select **Add term or translation** on the toolbar.
 - Press the keyboard shortcut [Ctrl]+[Insert].
- Add term pairs by first selecting the source term. Next, right-click and choose **Add as New Term** from the context menu. Alternatively, select **Add term or translation** on the toolbar. Select the corresponding translation, right-click and choose **Add as Translation** from the context menu. Alternatively, select **Add term or translation** again on the toolbar.

Text window

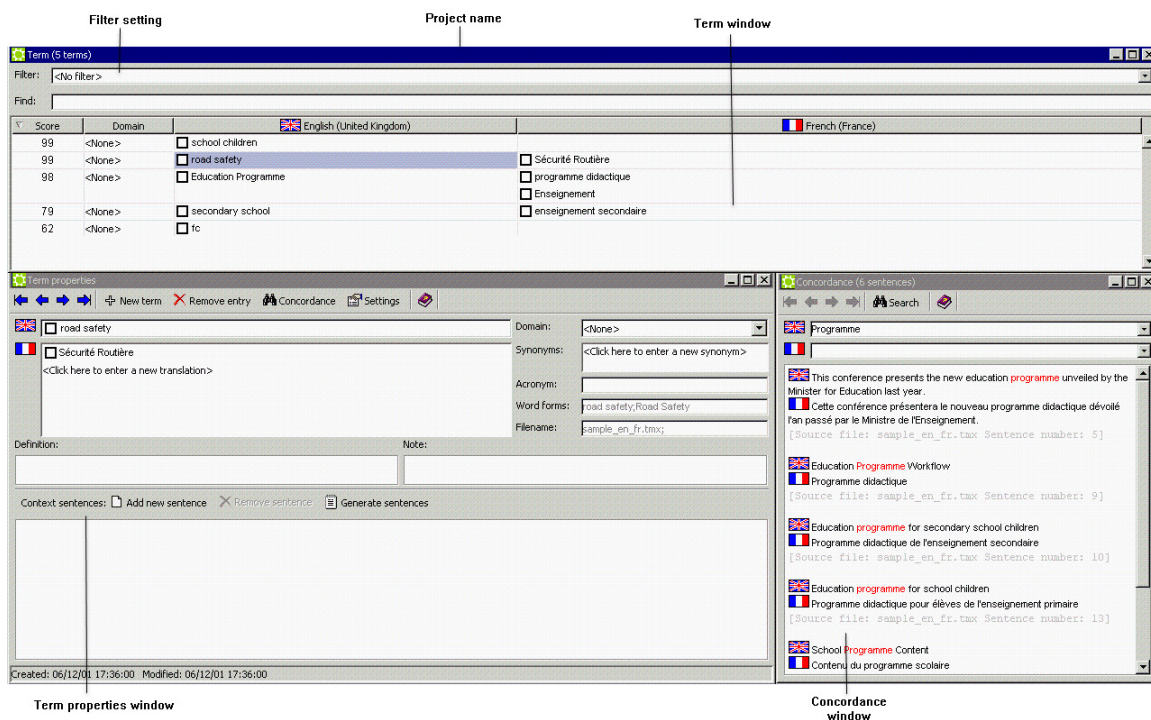
There are a number of options available in the text window toolbar:

- **Navigation:** Use Next page, Previous page, First page, Last page to scroll through the pages of the document in the text window.
- **Concordance:** Select **Show concordance** to display further concordance matches for the term candidate in the Concordance window.
- **Term properties:** Select **Show term properties** to display the term candidate in the Term properties window.

- **Go to:** Select **Go to sentence** to locate a specific sentence number by entering a number into the Go to sentence dialog.
- Add terms by selecting the term, right-clicking and choosing **Add as New Term** from the context menu or by selecting **Add term or translation**.
- Remove terms by selecting the term, right-clicking and choosing **Delete Term** from the context menu, by selecting **Delete term or translation** or by pressing [Delete].
- The **Show/Hide flag** displays or hides the corresponding source and/or target language flags.
- Use **Undo** and **Redo** to undo or redo your most recent action.
- Select **Help** to open the online Help for MultiTerm Extract.

MultiTerm Extract Interface

This section describes how MultiTerm Extract terms are displayed for viewing and validation.



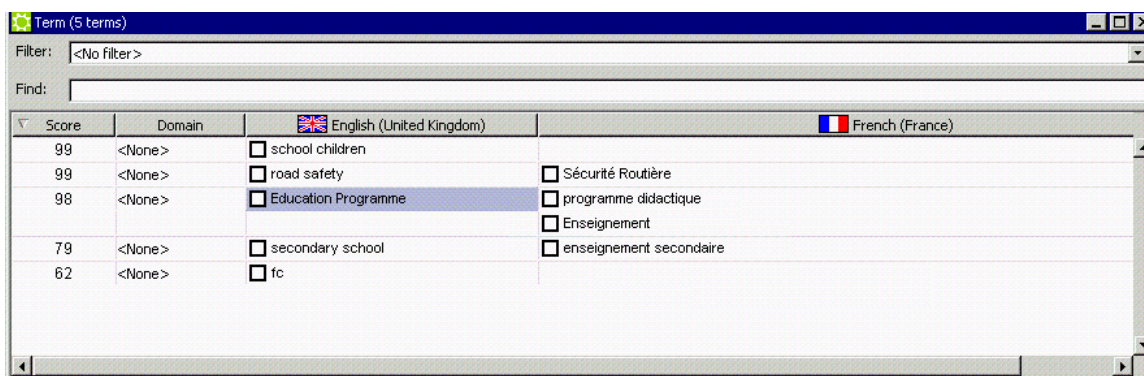
The interface is divided into four parts:

- **Menu and toolbars** - Located at the top of the interface.
- **Term window** - Displays the extracted terms in spreadsheet format. If the project is a bilingual project the Term window also contains a list of translated terms.
- **Term properties window** - Displays additional information about a selected term and allows you to carry out global operations on the list of extracted terms.
- **Concordance window** - Displays the terms in context.

The next section explains how to use the Term, Term properties and Concordance windows to review and validate terms before exporting them.

Term window

Extracted terms are displayed in the Term window.



Score	Domain	English (United Kingdom)	French (France)
99	<None>	<input type="checkbox"/> school children	
99	<None>	<input type="checkbox"/> road safety	<input type="checkbox"/> Sécurité Routière
98	<None>	<input type="checkbox"/> Education Programme	<input type="checkbox"/> programme didactique
			<input type="checkbox"/> Enseignement
79	<None>	<input type="checkbox"/> secondary school	<input type="checkbox"/> enseignement secondaire
62	<None>	<input type="checkbox"/> fc	

The Term window contains a list of all the terms that MultiTerm Extract has extracted in the current project. The spreadsheet presentation includes the following information about each term:

- **Filter** - It displays the active filter.
- **Find** - It is used to search for candidate terms among the source terms in the Term window. This is not case-sensitive. After entering the text and viewing the results, you can return to the term list in the Term Window by deleting the string and pressing [Enter].
- **Score** - It displays the score that MultiTerm Extract assigns to a term during the extraction process. The score is largely calculated using the frequency with which a term appears in the document. High scores indicate probable terms. This column is not available in the **Translation Projects** and **Dictionary Compilation Projects**.
- **Domain** - It shows the term category. You can change the domain in the Term window in the following ways:
 - For a selected term, right-click the selected term and choose a domain label from the **Set Domain** submenu on the context menu. Alternatively, double-click the **Domain** column and choose a domain label from the drop-down list.
 - For several terms, select several terms at once by pressing [Ctrl]+[Shift] and selecting the relevant terms. Right-click any of the selected terms and choose a domain label from the **Set Domain** submenu on the context menu.

Select **Settings** in the Term properties window to display the Term Properties Window Options dialog. Use this dialog to define the domain labels for your project. Once you have added a domain label there, it becomes automatically available from the **Domain** column in the Term window. See “Term Properties Window” on page 33. If the **Domain** column is hidden, right-click in the spreadsheet area or in the title bar of the Term window and select **Show Domain**. To hide it again, right-click in the spreadsheet area or in the spreadsheet header and select **Hide Domain**.

- **Source Language Term** - MultiTerm Extract lists the extracted source language terms under the source language. If the source language term check box is selected, it indicates

it is a validated term. When you first run the extraction process, none of the terms are validated.

- Translations - The translation(s) for the extracted term. MultiTerm Extract lists translations under the target language. Translations also require validation. You can add a translation in the Term window by right-clicking and selecting **Add Translation** from the shortcut menu or by pressing [Ctrl]+[Insert], but this is only possible when no **Filter** is active.

Note: If an acronym is found, the text is placed in the corresponding box in the Term properties window. The definition or long form of the acronym is displayed in the window.

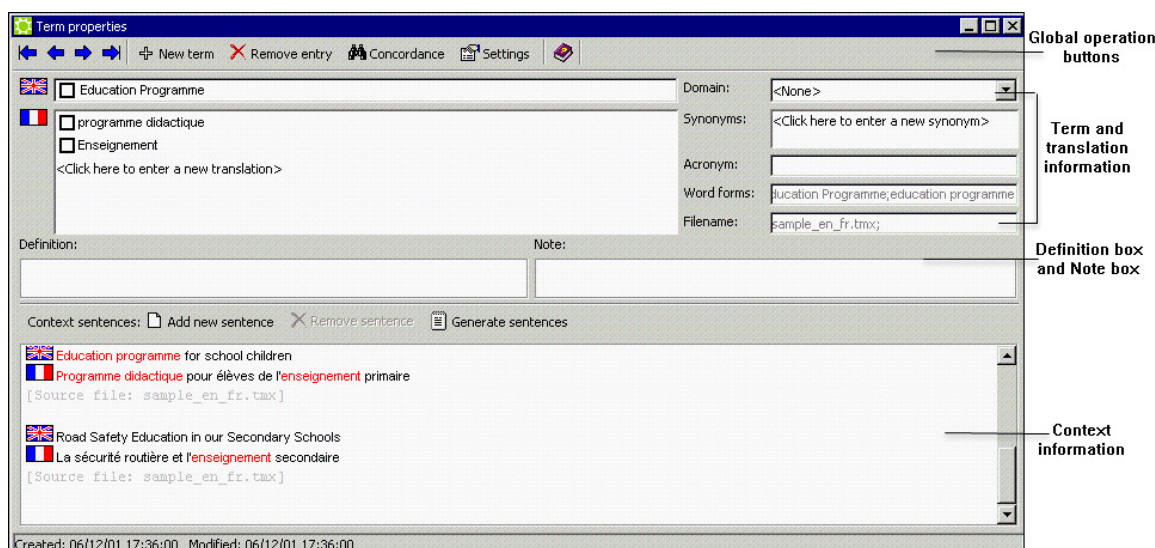
Sorting Terms

The default sort order for terms is by **Score** which lists terms starting with the most probable terms. You can also sort terms by domain or source language by clicking on the column label. A gray arrow indicates the current sort order.

Deleting Terms

To delete terms in the Term window, click to select the term to delete, right-click and choose **Delete** from the shortcut menu or press [Delete]. The term is removed from the term candidate list.

Term Properties window



The Term properties window is divided into four areas:

- Global operation buttons
- Term and translation information
- **Definition** box and **Note** box

- Context information

Global operation buttons

- Select **Go to first term**, **Go to last term**, **Go to previous term** and **Go to next term** to scroll through the extracted terms and view their properties.
- Select **New term** to add a new term to the extracted list.
- Select **Remove** entry to remove the currently selected entry from the MultiTerm Extract project.
- Select **Concordance** to display concordance information about a term
- Select **Settings** to display the Term Properties Window Options dialog. You can create new domains, specify the default domain and select which boxes are displayed in the Term properties window.

Term and translation information

This area displays general information about the selected term and its translations.

- **Source Language Term:** The source language term candidate as extracted by MultiTerm Extract. The language is shown with a flag. Checked boxes indicate validated terms. If you have run the extraction process for the first time none of the terms will be validated.
- **Translation:** The target language is shown with a flag. You can validate a candidate translation by selecting the check box before the translation, or enter a new translation. To enter a new translation, select the **Click here to enter a new translation** checkbox and start typing. To delete a translation, select the term in the **Translation** box of the Term properties window and press [Delete]. Alternatively, select the term in the Term window and click **Delete**.
- **Domain:** This shows the term category. You can specify the domain for a selected term by choosing the domain from the drop-down list in the **Domain** box. Alternatively, you can click in the **Domain** box and enter a new domain label. The new label is added to the list of available domains.
- **Synonyms:** You can store synonyms of the term in this box. For example, you could enter lecture, discourse or oration.
- **Acronym:** You can store any acronym associated with the source term in this box.
- **Word forms:** Displays the word forms for the source term as found during term extraction. This box is read-only.
- **Filename:** Displays the name of the file(s) from which the source term was extracted. This box is read-only.
- **Created:** The date and time that the term was created. This information is displayed in the status bar.
- **Modified:** The date and time that the term was modified. This information is displayed in the status bar.

Note: When you perform an export, only the term and not the word forms are exported.

Definition box

Add a definition of the term in the **Definition** box.

Note box

Add any comments about a term or its translation(s) in the **Note** box.

Context information

The **Context sentences** box stores sentence(s) showing the term in context.

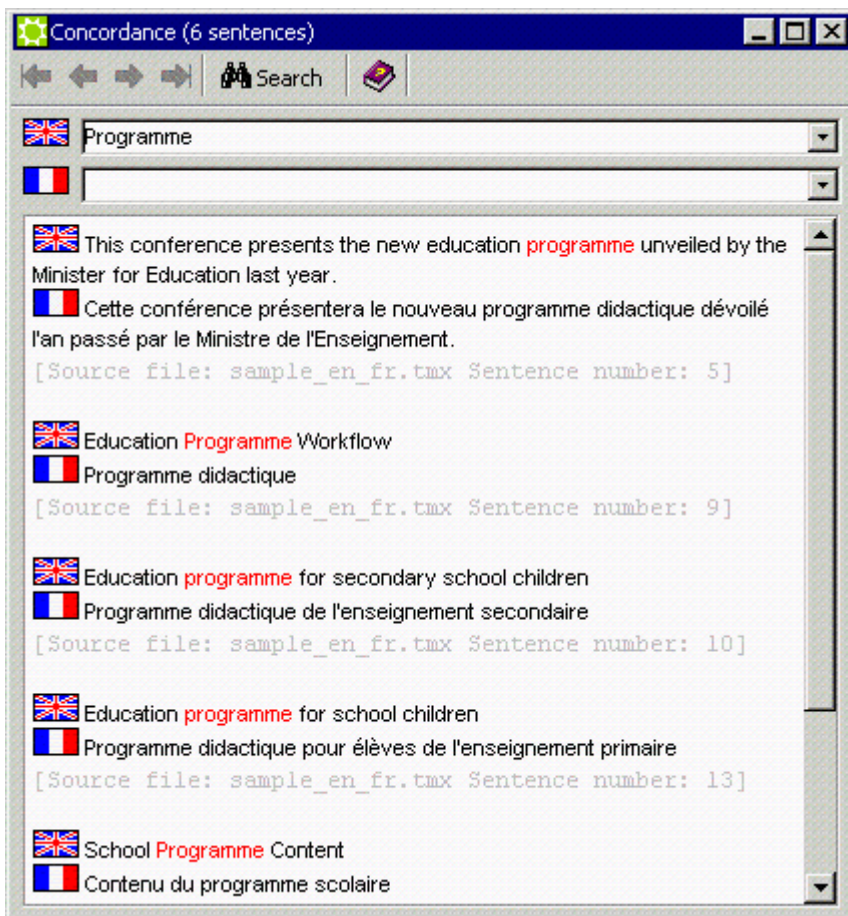
- Select **Add new sentence** to enter a sentence that shows the term in context. Enter the sentence in the **Context sentences** box. The corresponding flags for each language are displayed before each sentence. Alternatively, you can right-click a sentence in the Concordance window and select **Add As Context Sentence** from the context menu.
- Select **Remove** sentence to delete context sentences that are not suitable.
- Select **Generate sentences** to generate context sentences for a selected term or all terms. The default number of context sentences is five. Review and edit the displayed context sentences.

When you export terms, you can attach context sentences to each exported term as well as the name of the file from which the sentence was extracted.

Note: By default, terms and translations that were validated and exported from the project during previous edit sessions are formatted in green. You cannot edit these terms and translations.

Concordance window

The Concordance window displays the extracted terms in context.



There are several ways of displaying a term in the Concordance window:

- In the Concordance window, highlight the term in the Term window and press [Enter] to display it.
- In the Concordance window, enter the term in the term box and either press [Enter] or select **Search**. MultiTerm Extract locates the term and displays it in the Concordance window.
- In the Term and Text windows, select a term, right-click and choose **Concordance** from the context menu.
- In the Term properties window, select **Concordance**.

Note: You can also select a term or place the cursor on it in the text window and press [F3] or select **Show concordance**.

If there is more than one concordance hit shown in the Concordance window, you can move from term to term using the following keyboard shortcuts:

- Place the cursor on a term. The text changes to a blue color.
- Press [Tab] to go to the next occurrence of the term in the Concordance window.
- Press [Shift]+[Tab] to return to the previous occurrence of the term in the Concordance window.

Word forms and translations are displayed in context, that is, within a sentence. This is a sentence from the file from which they were extracted. The word form or translation is highlighted in the text using a different color, size or font, depending on the settings that you selected in the Format dialog. You can access the Format dialog by selecting **Tools > Format** from the menu bar. The selected term is displayed in blue. If you are working with a **Monolingual Term Extraction Project**, only the source language box is displayed.

Adding or deleting terms in the Concordance window

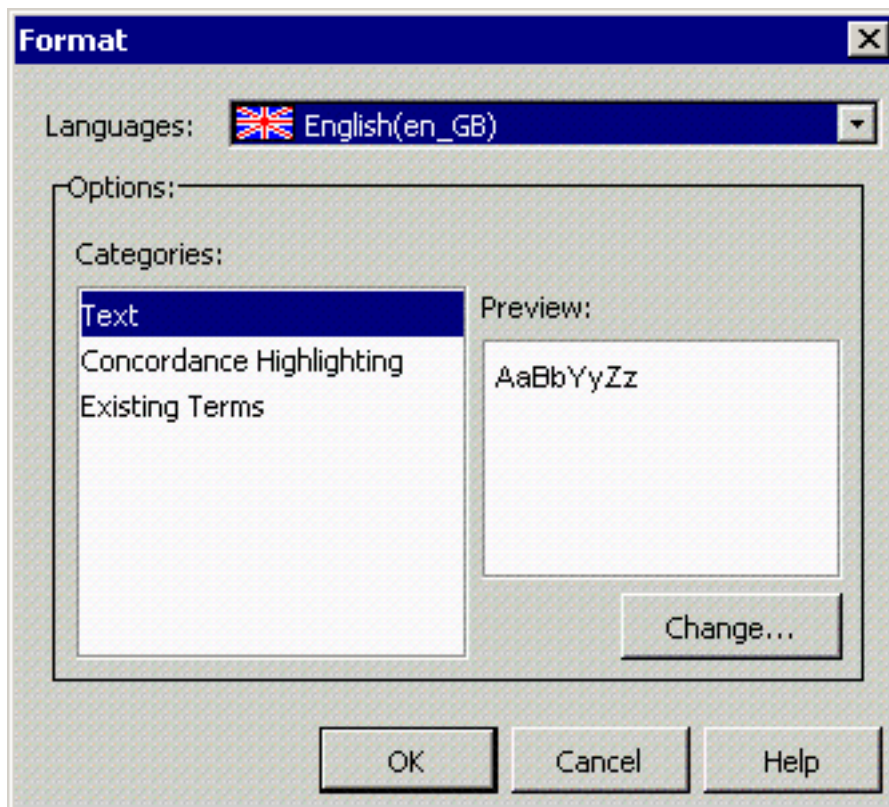
- To add a new term or translation from the Concordance window, select a term, right-click and choose **Add as New Term** or **Add as Translation** from the context menu or press [Ctrl]+[Insert]. The term is displayed on the term candidate list immediately and is assigned a term score of 100.
- To delete a term or translation from the Concordance window, right-click and choose **Delete Term** if it is a source language term or **Delete Translation** if it is a target language translation from the context menu or press [Delete]. The term is removed from the term candidate list.

Formatting terms in the Concordance window

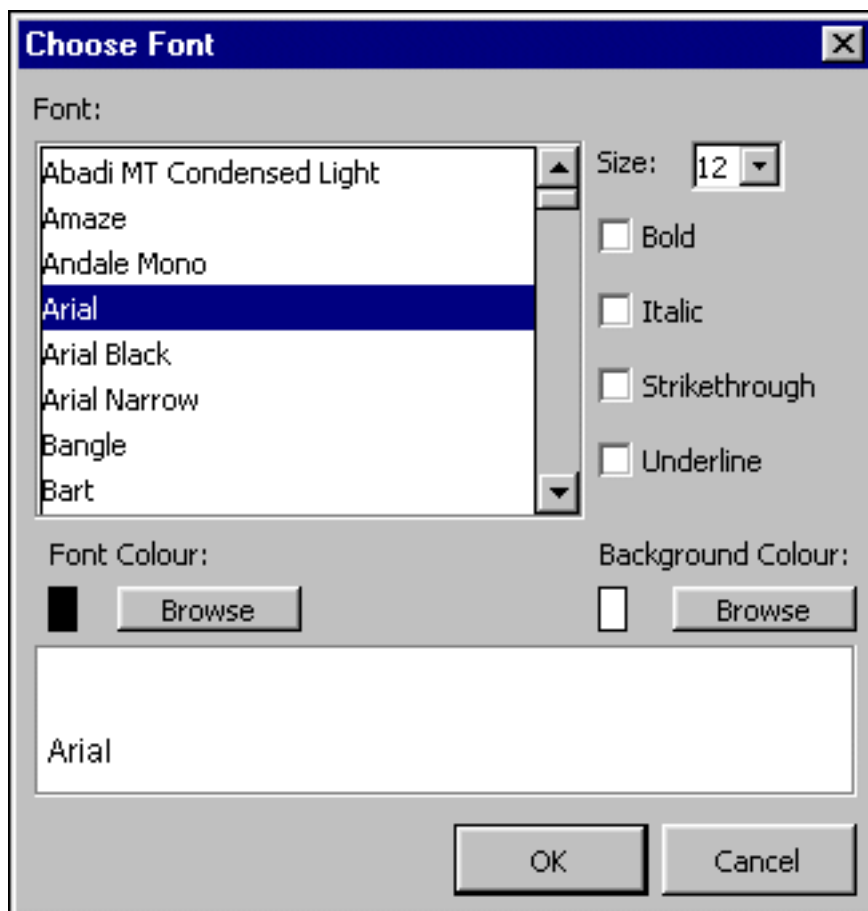
In the Concordance window, the default formatting for the text is Arial 12 point and Arial 12 point red for the highlighted word form or translation. You can modify the way text and terms are displayed in the Concordance window.

Procedure

1. Select **Tools > Format** from the menu bar. The Format dialog is displayed.



- When the **Text** category is selected, the Preview pane shows how text will be displayed in the Text window that is used for manual term extraction and in the Term, Term properties and Concordance windows.
 - When the **Concordance highlighting** category is selected, the Preview pane shows how matching terms will be displayed in the text window that is used for manual term extraction and in the Concordance window.
 - When the **Existing Terms** category is selected, the Preview pane shows how existing terms will be displayed in the Term, Term properties and Concordance windows.
2. Select **Change** to open the Choose Font dialog.



3. Select the **Font**, **Font Colour**, **Size** and **Background Colour**. Select **OK** to preview the font in the Format dialog.
4. Select **OK** to apply the changes and to return to MultiTerm Extract.
Repeat this process for each language in your MultiTerm Extract Project.

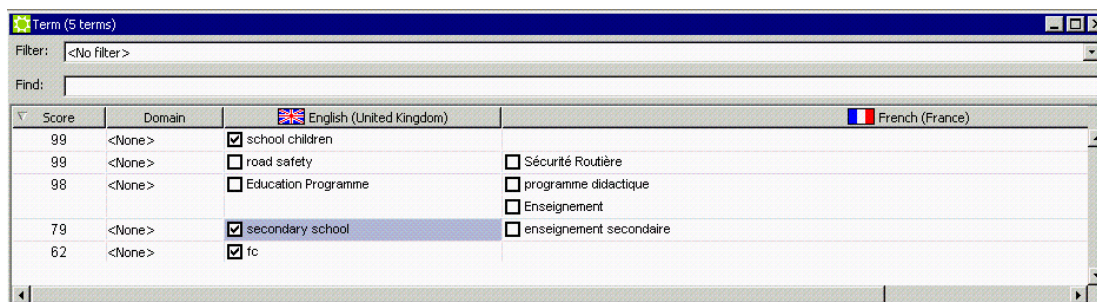
Validating extracted terms

To ensure that the extracted terms are accurate and appropriate, validate them.

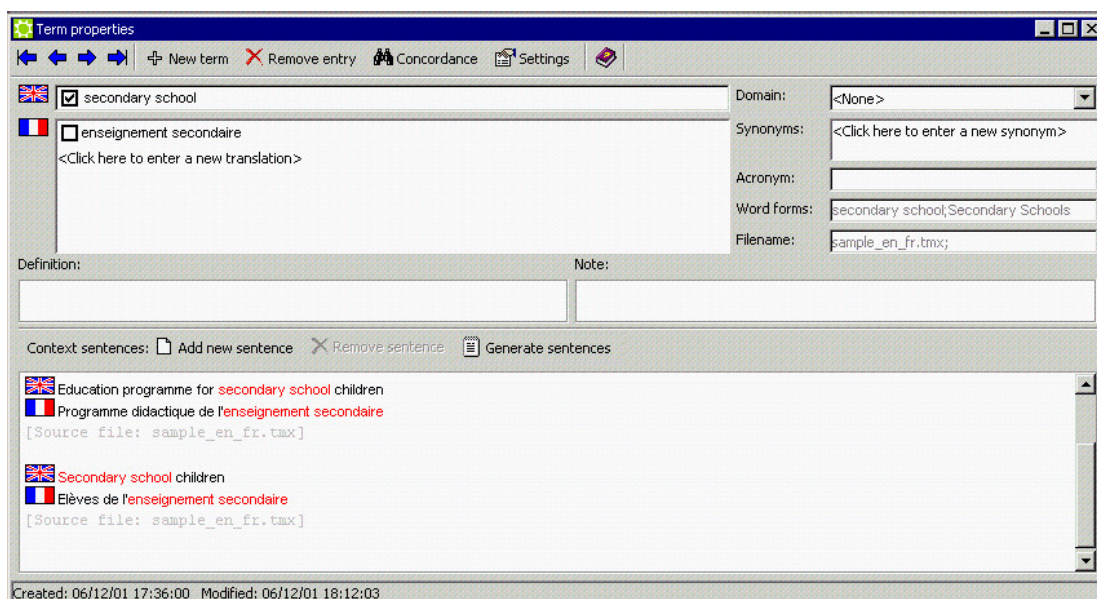
Procedure

1. Review the term candidates in the Term window.

3 Working with MultiTerm Extract



2. Manage the terms by deleting or validating them:
 - Select a term and press the space bar.
 - Select the checkbox corresponding to the term you want to validate.
 - Right-click the term and select **Validate** from the context menu. Use the down arrow to scroll through the term candidate list.
3. After you review all term candidates in the Term window, use the Term properties window to examine terms in more detail. You can add new terms and remove term candidates that are not useful. In the Term window, select a term to display it in the Term properties window.



4. Review the term and its translations, using the **Generate** sentences button to refer to concordance sentences where necessary. Make any modifications required to the term properties.
5. Select **Next term** to display the next term in the list. Repeat steps 2 and 3.
6. Continue until you have reviewed and validated all the terms in the MultiTerm Extract project.

Note: You can validate all term candidates by right-clicking in the Term window and selecting **Validate All** from the context menu. Alternatively, to start the term review again, select **Invalidate All** to invalidate all term candidates.

4

Exporting terms in MultiTerm Extract

After your extracted terms have been validated in MultiTerm Extract, they can be exported using the Export Wizard.

This wizard takes through the process of exporting extracted terms from your MultiTerm Extract project. You can export to a:

- Project Termbase
- MultiTerm Termbase
- MultiTerm XML Format
- Tab-delimited Text Format

Note: If you are exporting to MultiTerm export format, MultiTerm Extract allows you to add extracted terms to your existing termbase. You can also exclude terms from being added to your existing termbase by the term extraction process. You should close your termbase before starting the export.

Export definitions

During the export process an export definition file is used containing information such as the export type and file format.

When exporting you can use an existing export definition file or create a new one. MultiTerm is the default export type when creating a new export definition file.

Prerequisites for term export

Before you can export terminology correctly and accurately, you must be familiar with various information items.

If you intend to export data directly to a remote MultiTerm termbase, the following information is required to define termbase connection settings:

- MultiTerm Server computer details - These details determine the name of the MultiTerm Server computer that provides access to the termbases with which you want to work.
- MultiTerm Server logon details - These details determine the user name and password of your MultiTerm Server login.

Contact your MultiTerm administrator for these details and for information about your termbase user rights. You must have write permission in the appropriate areas of the specified remote termbase to export data directly from MultiTerm Extract. If you intend to export directly into a local termbase, determine the name and location before you start the Export Wizard. You have exclusive access and unlimited user rights in all local termbases, and no login details are required.

Exporting terms

You can export extracted terms from MultiTerm Extract to integrate them in your termbases.

Before you begin

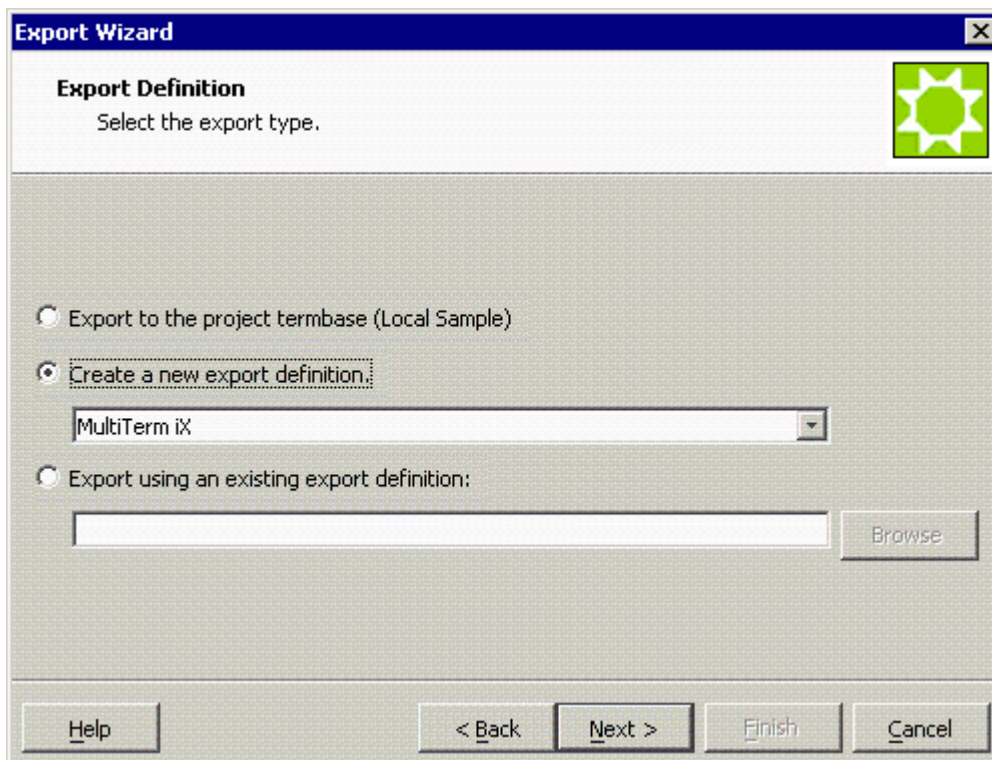
Ensure that all “prerequisites for term export ” on page 42 are observed.

Procedure

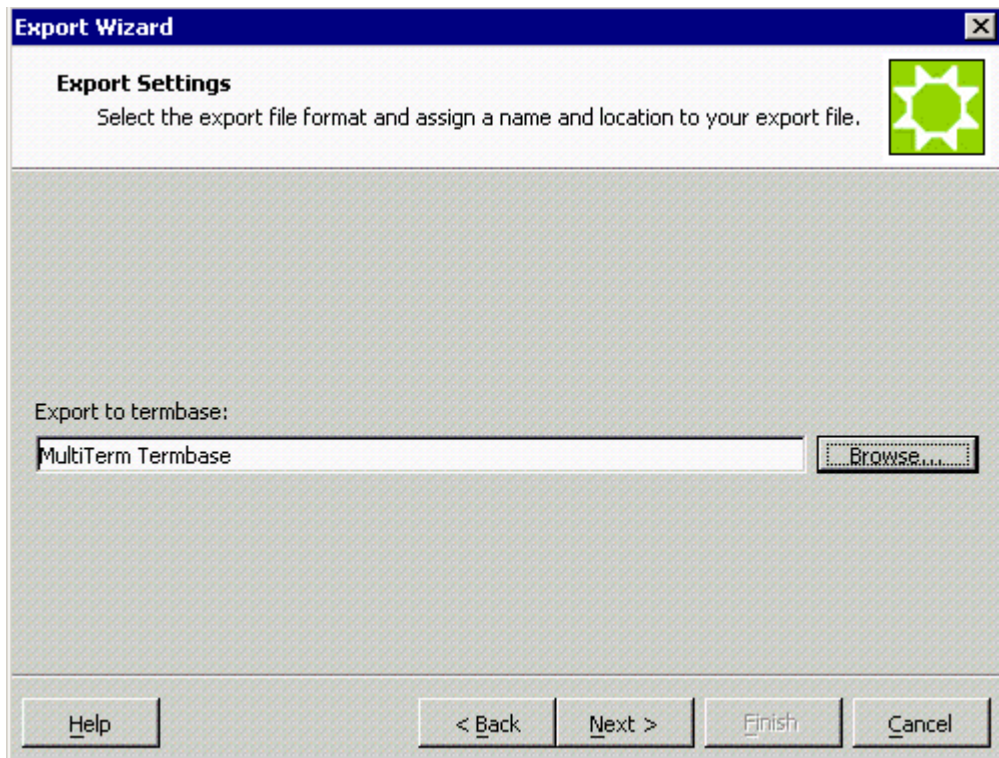
1. Access **File > Export** from the menu bar.



2. In the Export Wizard, select **Next**, and, on the Export Definition page, select the export type:

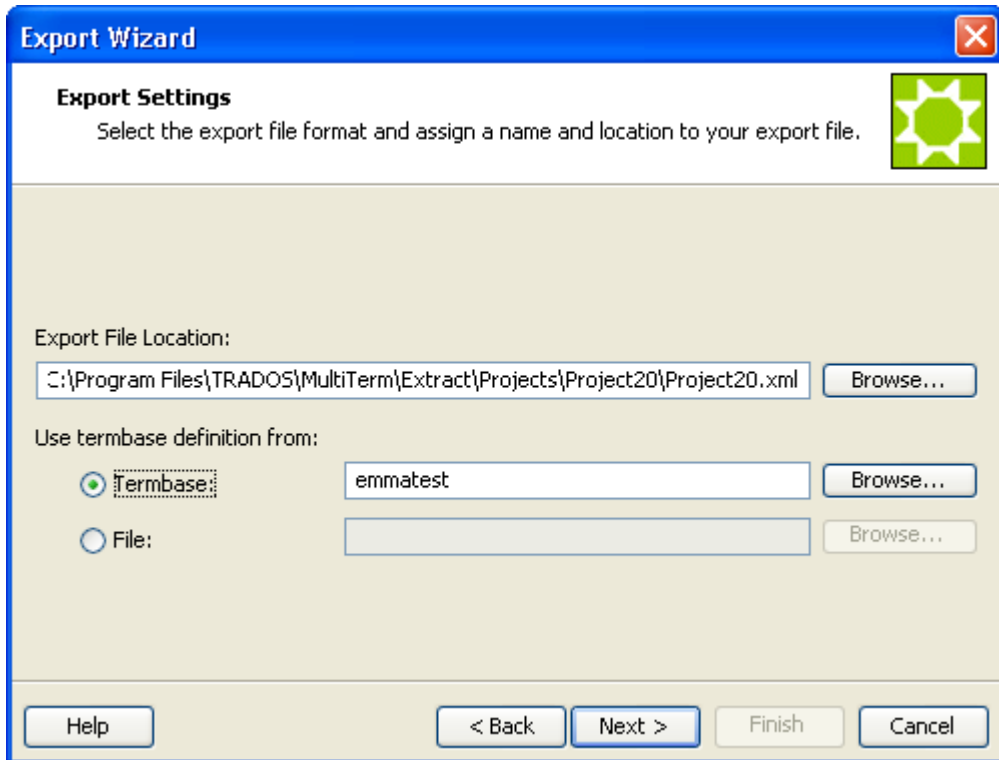


- To export to a project termbase, select **Export to the project termbase**.
 - To export to a MultiTerm termbase, select **Create a new export definition** and select **MultiTerm Termbase** from the drop-down list.
 - To export to MultiTerm XML format, select **Create a new export definition** and select **MultiTerm XML Format**.
 - To export to tab-delimited text format, select **Create a new export definition** and select **Tab delimited** from the drop-down list.
 - To export using an existing export definition, select **Export using an existing export definition**. See "Exporting using export definitions " on page 52.
3. Select **Next**. On the Export Settings page choose an options. The options are different depending on which type of export you selected. Use this page to define the export settings.
 - To export to a project termbase, go to step 7.
 - To export to a MultiTerm termbase, go to step 4.
 - To export to MultiTerm XML format, go to step 5.
 - To export to tab-delimited text format, go to step 6.
 4. If you selected to export to a MultiTerm termbase, the following page is displayed. Select **Export to termbase**, and then select **Browse** to locate the termbase.

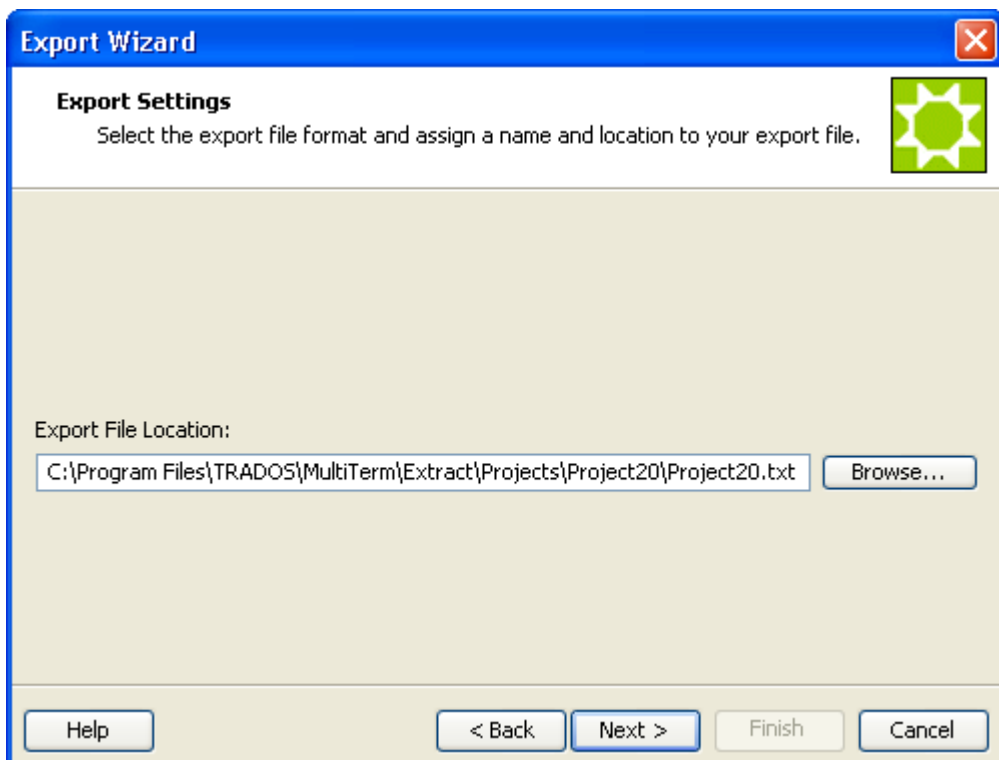


Note: You may be required to reconnect to the termbase. If this happens, you must log on again.

5. If you selected to export to MultiTerm XML format, the following page is displayed.
 - a. Select the **Export File Location**. By default, MultiTerm Extract selects the current projects folder and creates an XML file (*.xml) with the same name as the project name.
 - b. Specify a **Termbase** or termbase definition **File** (*.xdt). The selected item provides MultiTerm Extract with the termbase definition reference that is required to create the export file.



6. If you selected to export to tab-delimited text format, the following page is displayed. Select **Export File Location**. By default, MultiTerm Extract selects the current projects folder and creates a text file (*.txt) with the same name as the project name.

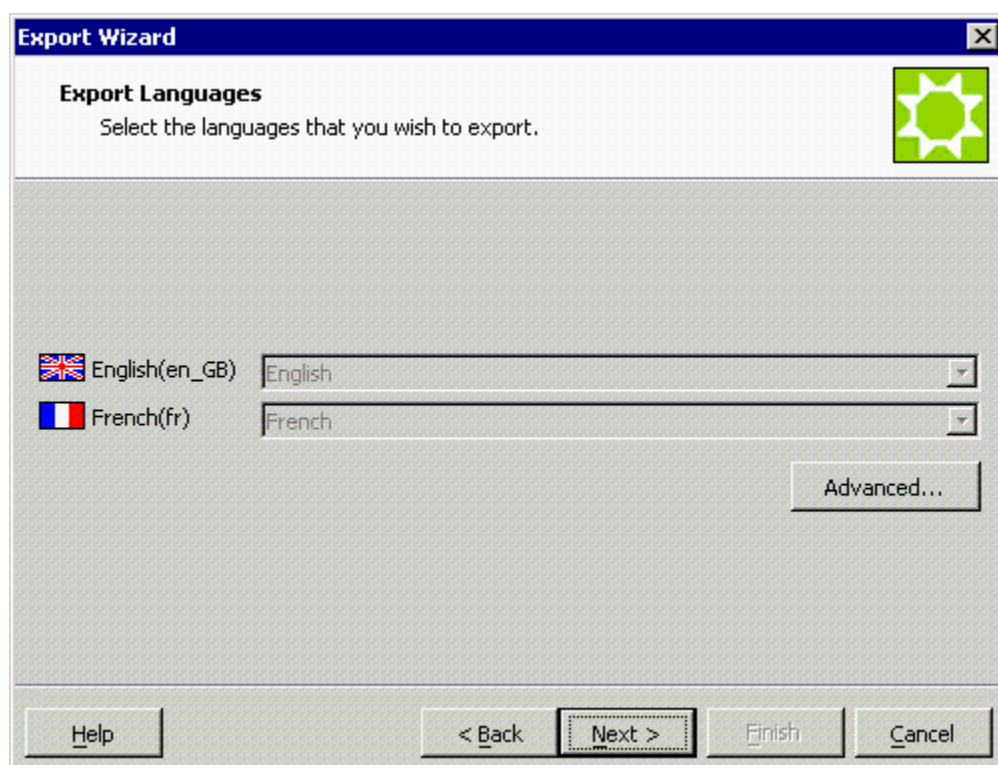


7. Select **Next**. On the Filters page, select or create a new filter. You can select a filter from the drop-down list. MultiTerm Extract ships with two predefined filter definitions: **Only Validated** and **Only Non Validated** terms. The default setting is **No Filter**.

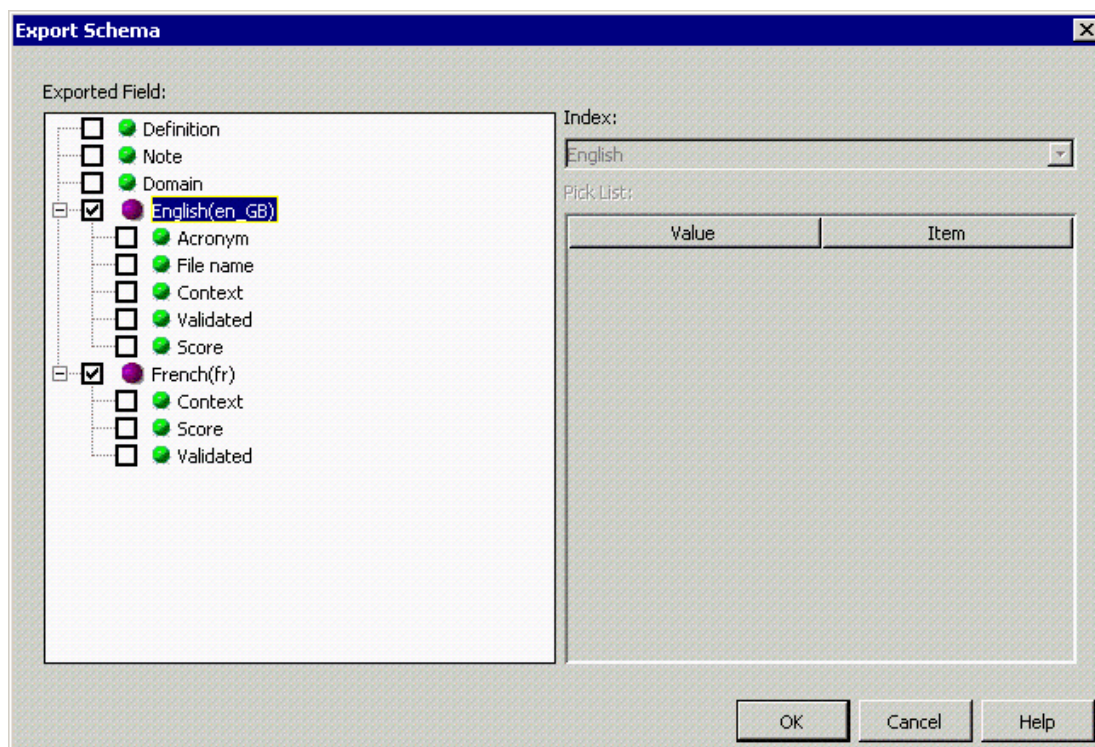


Note: Select **Create New Filter** to create a new filter or select **Edit Filter** to edit an existing filter. See “Using filters when exporting ” on page 59.

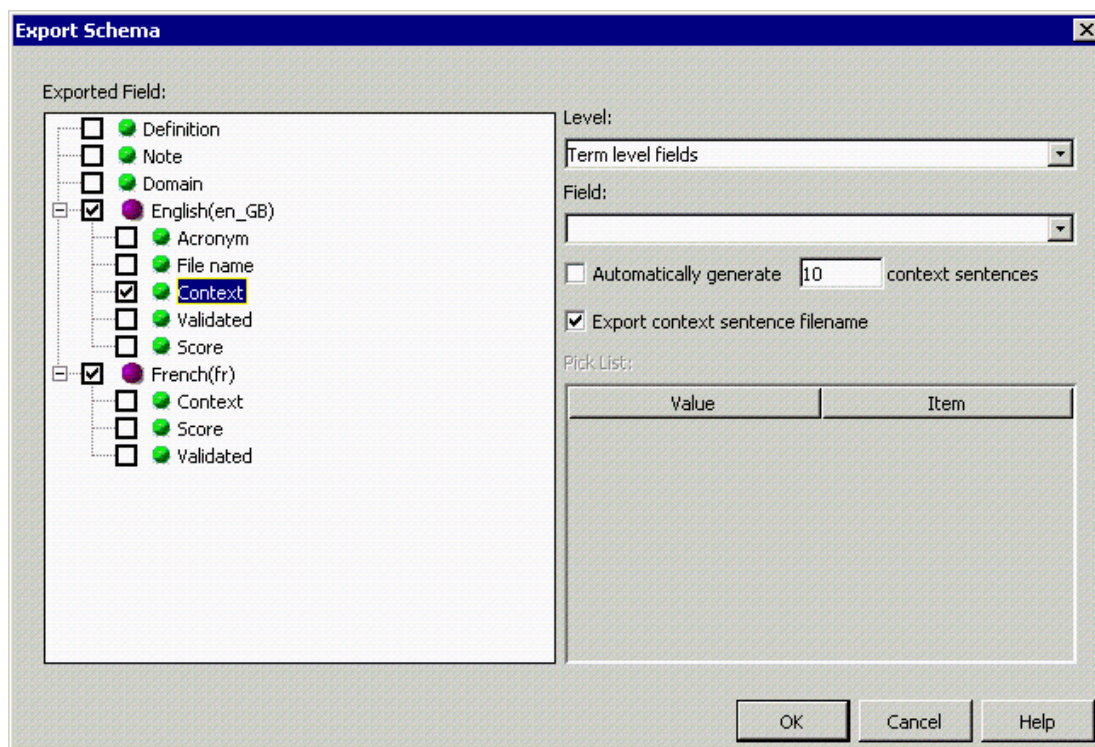
8. Select **Next**. The Export Languages page is displayed. Use this page to select the languages you want to export.
 - This page is not displayed if you selected to export to tab-delimited text format, go to step 13.



- On the Export Languages page, map the languages in your MultiTerm Extract project to the corresponding language in the MultiTerm termbase, project termbase or MultiTerm XML format. Select a MultiTerm language from the drop-down list for each language.
9. Select **Advanced**. The Export Schema dialog is displayed. Use this page to create an export schema.

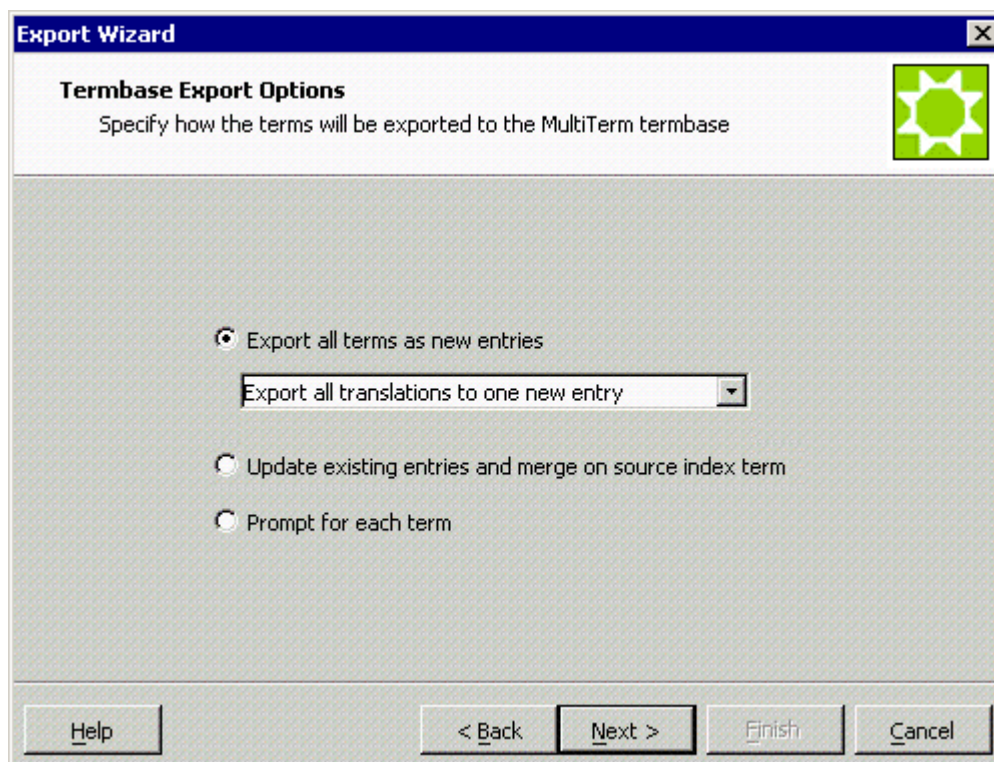


MultiTerm Extract automatically exports source and target terms to the termbase. If you create an export schema, you can also export the following information to the selected termbase: **Domain**, **Definition** and **Note** boxes. For source and/or target languages you can export **Validation** status information (**Validated**), **Score**, **Context** (and if required, context sentences and context sentence file name), **File name**, **Acronym**, **Modified** and **Created** boxes.



10. In the **Exported Field** box, select a checkbox to export information for that item. For example, select **Context** to export **Context** information. The boxes pertaining to that selected checkbox are displayed on the right side of the dialog.
 - In the **Level** box, select a level from the drop-down list to indicate which level the term is to be exported to the termbase. Each box should be associated with a level in MultiTerm, for example, **Entry level** fields, **Language** level fields and **Term level** fields.
 - Select the **Field** in the MultiTerm termbase to which to export **Context** from the drop-down list. MultiTerm Extract displays the MultiTerm termbase fields in a drop-down list.
 - Select **Automatically generate context sentences** to add context information to the termbase. The default setting for this option is 10 sentences. If you want to change the number of sentences, enter a different number
 - Select **Export context sentence filename** to export this information.
11. Select **OK** to return to the Export Wizard.
12. Select **Next**. The Termbase Export Options page is displayed. Use this page to select different export options.

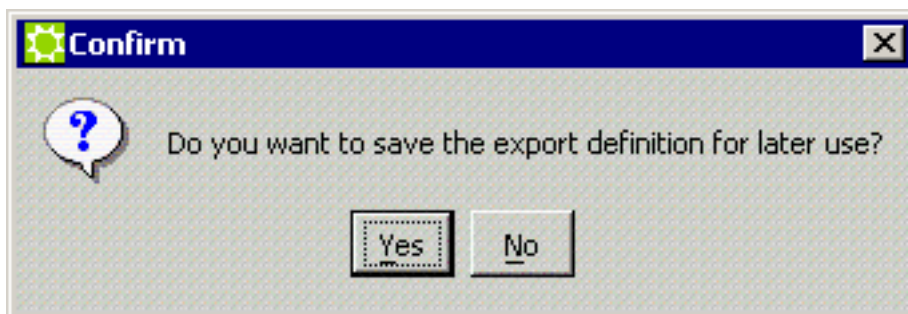
Note: This page is only displayed for exporting to a MultiTerm termbase or project termbase. For all other projects, go to step 13.



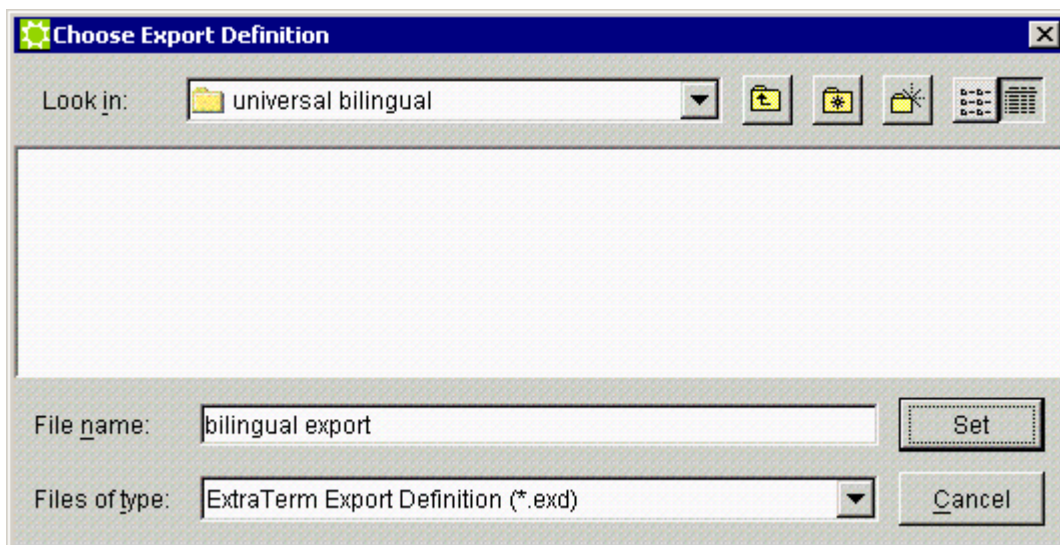
- Select **Export all terms as new entries** if each term is to create a new entry. You can choose between **Export all translations to one new entry**, if all translations are to be exported under the same entry or **Export each translation to a separate new entry**, if each translation of a given source term is to be exported under a different entry.
 - Select **Update existing concepts and merge on source language term** if all termbase entries which have the same index term are to be merged and updated with newly exported information.
 - Select **Prompt for each term** to determine how each term is exported
13. Select **Next**. The Completing the Export Wizard page is displayed. Use this page to review a summary of the options you selected for this export. Select **Finish** to start the export process.



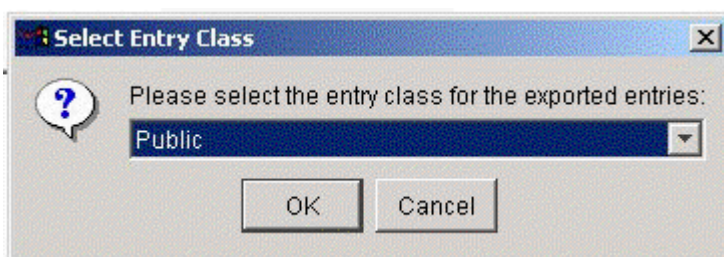
14. MultiTerm Extract prompts you to save the export definition for future use. Select **Yes** if you want to save the export definition for re-use. For more information, see “Exporting using export definitions ” on page 52.



15. In the Choose Export Definition dialog, enter the file name for the export definition and select **Set**.



16. If you are exporting to a remote termbase, a message is displayed asking you to specify the termbase entry class to which data will be exported. Select the entry class from the drop-down list.



Note: You must have write permission for the specified termbase entry class to export data directly from MultiTerm Extract. If necessary, contact your MultiTerm administrator for precise details of your termbase user rights.

17. In the Export dialog, a progress bar indicates the export status. When the progress bar reaches 100%, select **OK** to exit the Export Wizard and return to MultiTerm Extract.

Exporting using export definitions

An export definition file defines the export type and file format for export.

The options displayed during the Export Wizard vary depending on which export definition file is selected. You can use an existing export definition file or create a new export definition file when exporting.

Exporting using an existing export definition

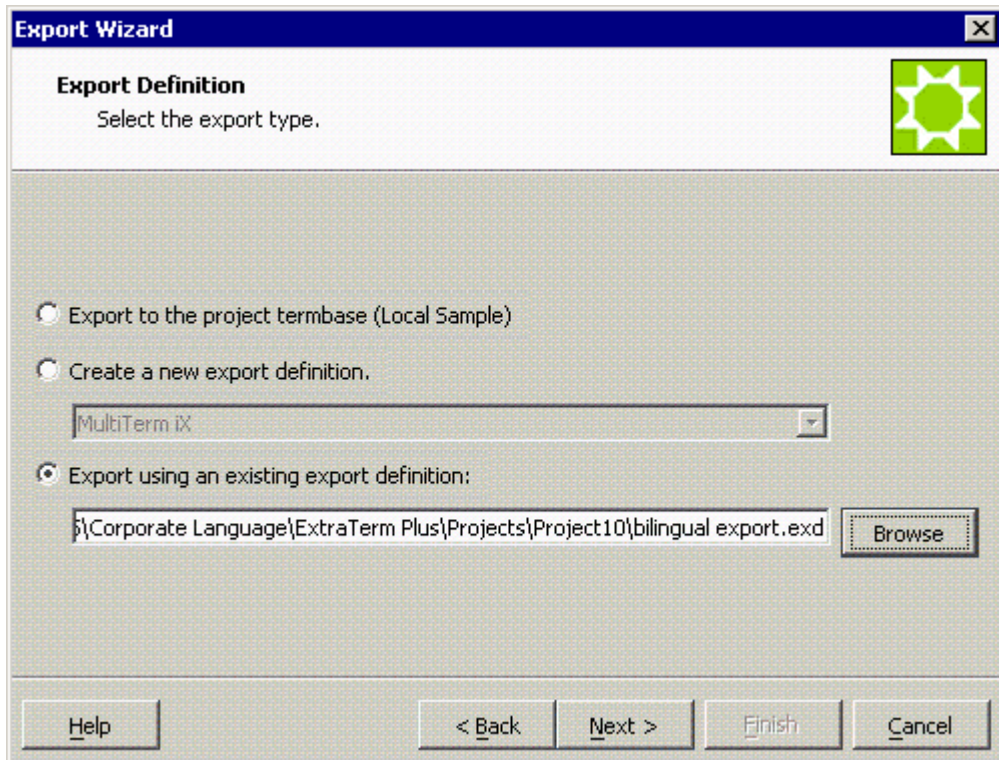
You can export extracted terms from MultiTerm Extract using an existing export definition.

Procedure

1. Access **File > Export** from the menu bar.



2. On the Export Wizard, select **Next**, and on the Export Definition page, select the export type.



3. Select **Export using an existing export definition** and select **Browse** to select MultiTerm Extract export definition file (*.exd). Select **Set**.
4. The Export Wizard guides you through the steps required for the chosen export definition.
5. When you reach the final page in the wizard, **Completing the Export Wizard**, select **Finish** to start the export process and to close the Export Wizard.



Exporting using a new export definition

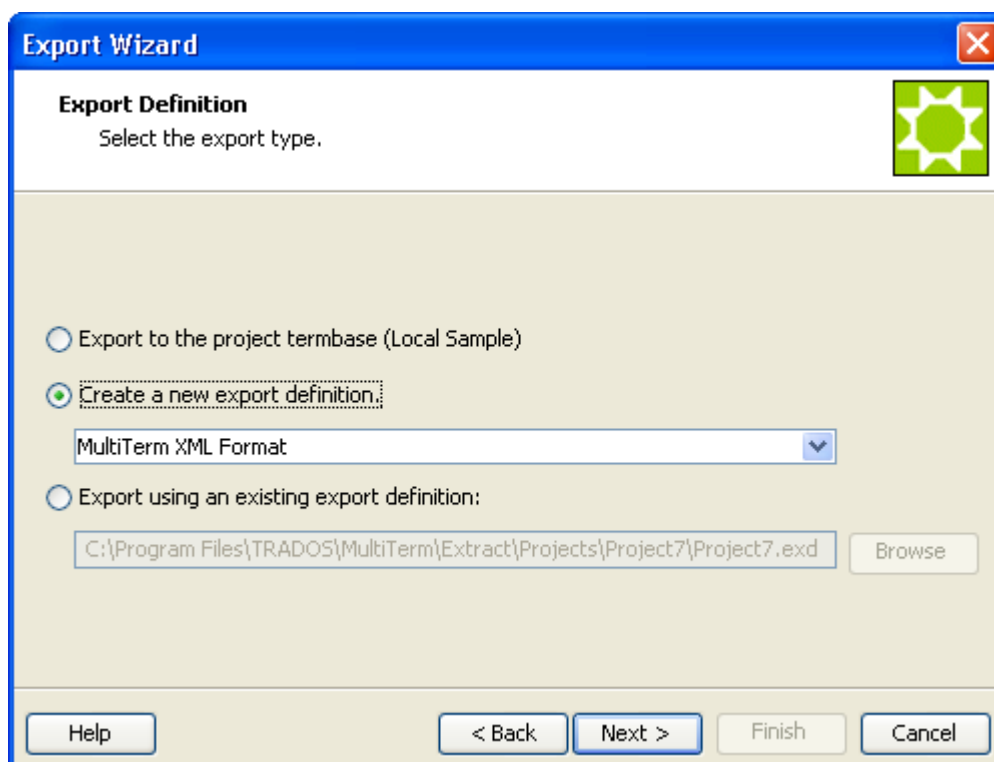
You can export extracted terms from MultiTerm Extract using a new export definition file.

Procedure

1. Access **File > Export** from the menu bar.



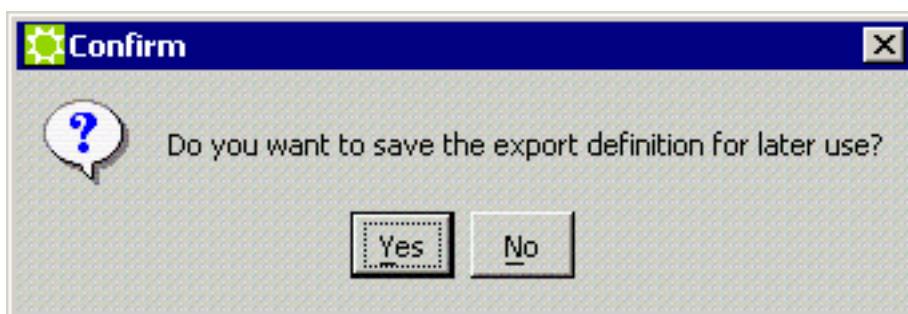
2. In the Export Wizard, select **Next**, and on the Export Definition page, select the export type.



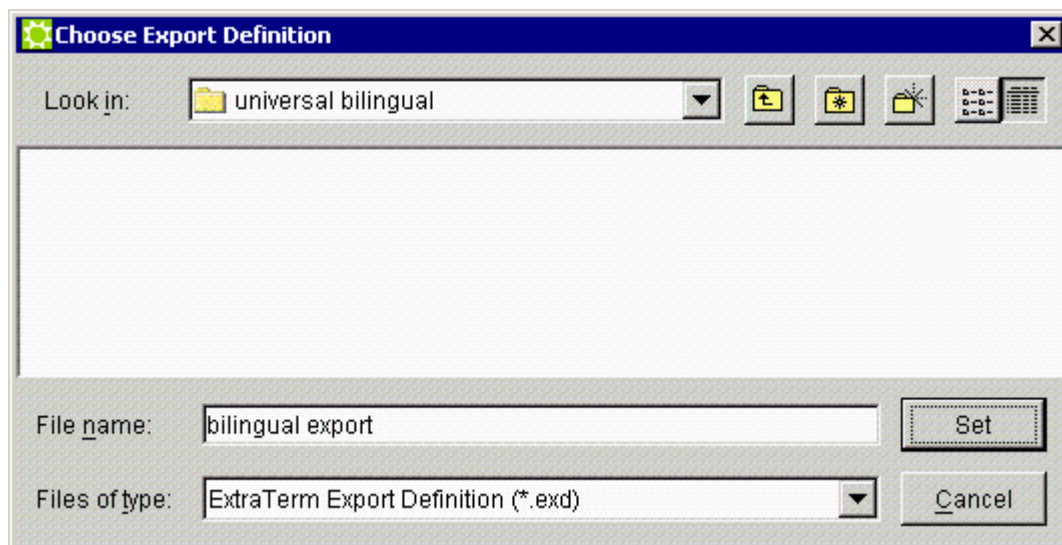
3. Select **Create a new export definition** and select the export type from the drop-down list.
4. Select **Next**. The Export Wizard guides you through the steps required for the new export definition. Options vary depending on which export format is selected. See "Exporting terms" on page 43.
5. When you reach the final page in the wizard, **Completing the Export Wizard**, select **Finish** to start the export process and to close the Export Wizard.



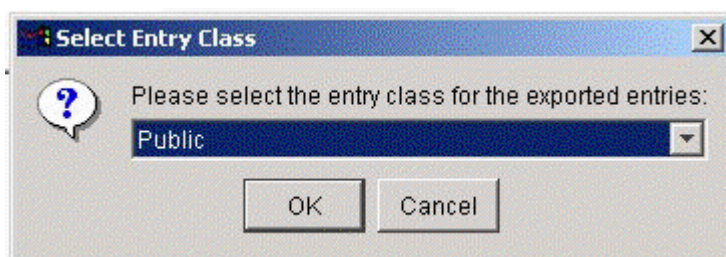
6. MultiTerm Extract prompts you to save the export definition for future use. Select **Yes** to save the export definition for re-use.



7. In the Choose Export Definition dialog, enter the file name for the export definition and select **Set**.



8. If you are exporting to a remote termbase, a message is displayed asking you to specify the termbase entry class to which data will be exported. Select the entry class from the drop-down list.



Note: You must have write permission for the specified termbase entry class to export data directly from MultiTerm Extract. If necessary, contact your MultiTerm administrator for precise details of your termbase user rights.

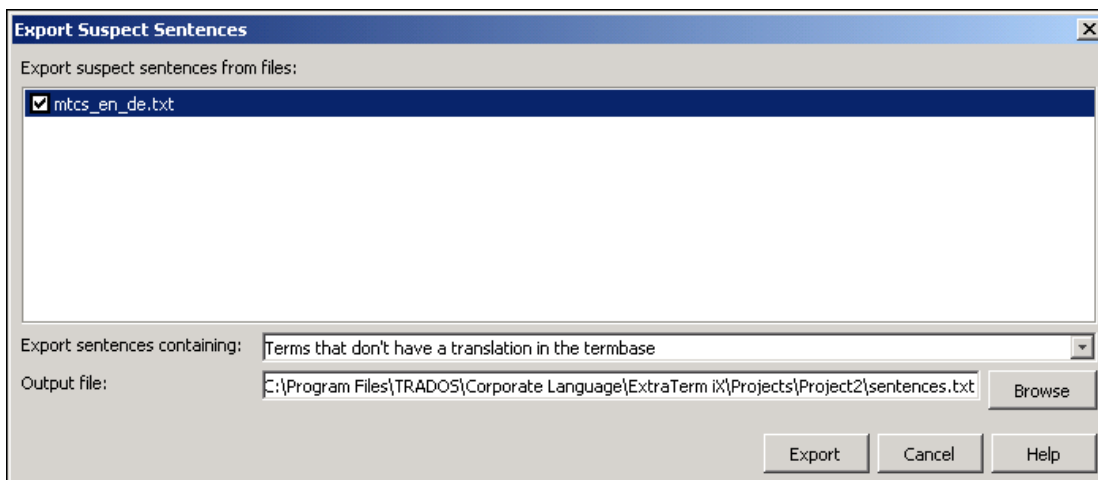
9. In the Export dialog, a progress bar indicates the export status. When the progress bar reaches 100%, select **OK** to exit the Export Wizard and return to MultiTerm Extract.

Exporting suspect sentences in a QA project

You can export suspect sentences from a file. This procedure can only be performed in a **QA Project**. Suspect sentences are sentences that contain terminology that does not match a translation in the termbase. Exporting suspect sentences allows you to edit them as a group.

Procedure

1. Access **File > Export Suspect Sentences** from the menu bar or press [Ctrl]+[E].



2. In the Export Suspect Sentences dialog, select the file from which you want to export suspect sentences.
3. Select sentences to export that contain the following:
 - **Terms that don't have a translation in the termbase**
 - **Terms that have a translation that is not in the termbase**
 - **All categories** (all suspect sentences)
4. Use **Browse** to select an output file.
5. Select **Export**. The sentences are exported to the output file.
6. Open the output file and edit the sentences as required.

Note: In the text window in the **QA Project**, you can select from a drop-down list which category of suspect sentences you want to highlight. You can navigate through the terms by pressing [Tab] to go to the next term and [Shift]+[Tab] to go to the previous term. To move from one suspect sentence to the next press [Ctrl]+[Tab].

Using filters when exporting

MultiTerm Extract uses filters in the export process when determining which terms to export.

This section explains the following tasks:

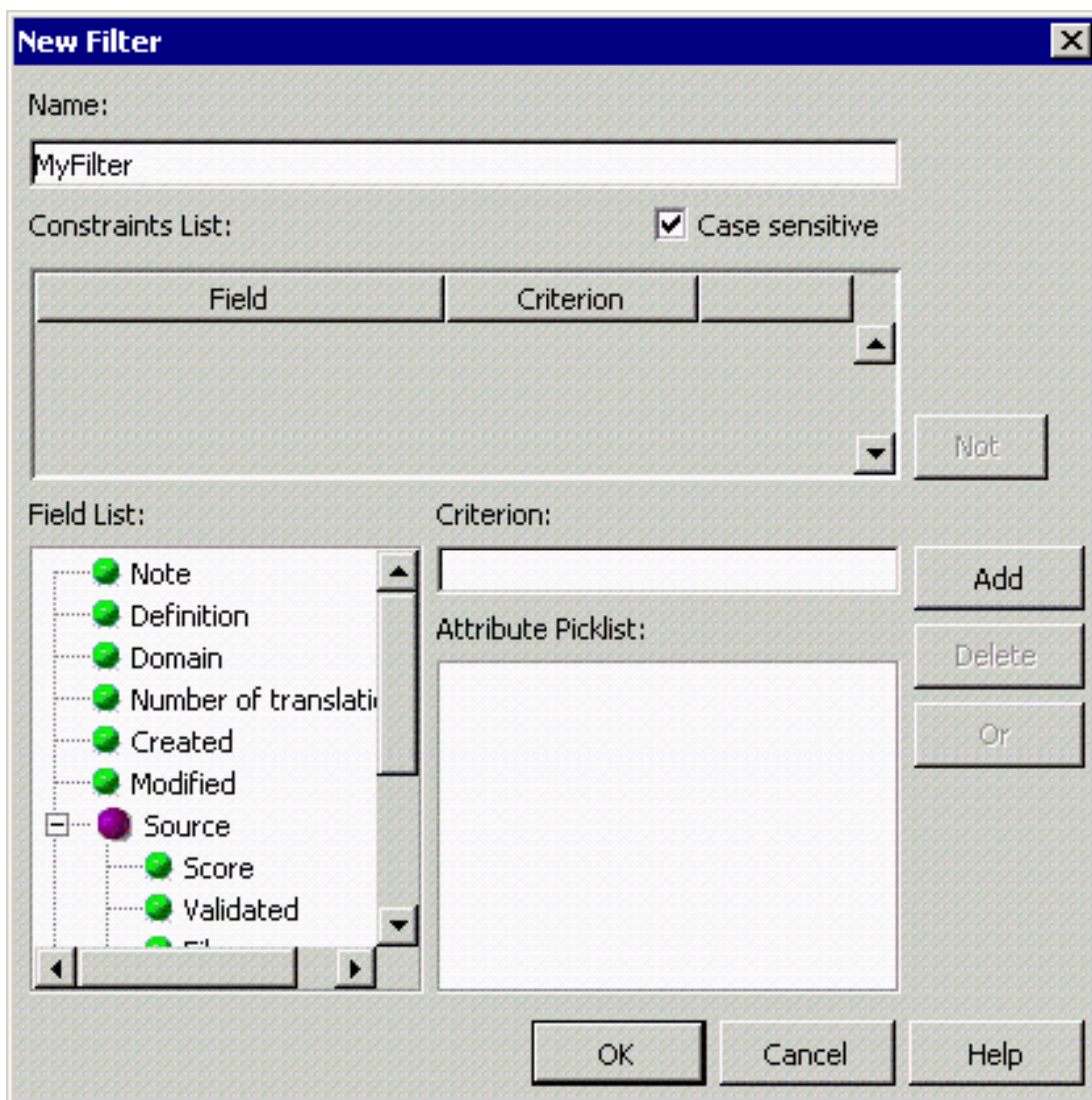
- Creating a new filter
- Editing a filter definition
- Removing a filter

Creating filters

You can create filters to sort the terms you want to export.

Procedure

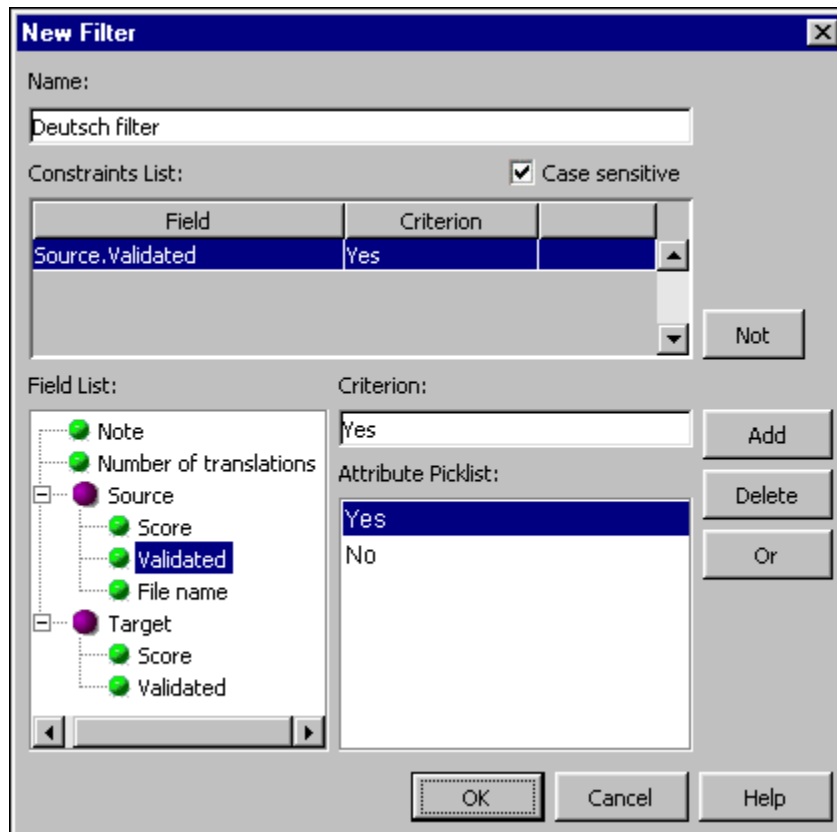
1. Access **Tools > Filters** from the menu bar.



Note: You can also access the New Filter dialog from the Export Wizard. Select **Create New Filter** or **Edit Filter** on the Filters page.

2. In the Filters dialog, select **New** to open the New Filter dialog.
3. In the **Name** box, enter a name for the filter to create. The default name for the filter is *MyFilter*.
4. Create a filter definition:
 - a. Select a box from the **Field List** and select **Add** to add it to the **Constraints List**.

- b. Specify a criterion to define how MultiTerm Extract should filter the selected box. If the selected box is associated with an attribute picklist, select an item from the **Attribute Picklist**. If the selected box is not associated with an attribute picklist, use the **Criterion** box to enter a suitable criterion. The criterion you specify is automatically added to the **Constraints List**. In the following screen shot, the filter definition consists of one constraint. The box **Validated** is added to the **Constraints List** and **Yes** is specified as the criterion. When this filter is active, MultiTerm Extract will export validated terms only.



- c. Repeat this process for each constraint to add to the filter definition. A filter definition may consist of one or several constraints. The tree structure in the **Field List** indicates whether a box applies to entry level, source language or target language content. The level to which a box belongs determines whether the filter constraint is valid for entry level, source language or target language content.
- d. Specify the entry level boxes:
- **Note:** Enter a text string to filter on in the **Note** box. If you select **<Empty>**, and choose **NOT** as the operator, MultiTerm Extract filters for all terms that contain a note.
 - **Definition:** Enter a text string to filter on in the **Definition** box. If you select **<Empty>**, and choose **NOT** as the operator, MultiTerm Extract filters for all terms that contain a definition.
 - **Domain:** Enter a domain label to filter on.
 - **Number of translations:** Enter the greater than [>], less than [<] or equal [=] sign and a value to indicate the number of translations. For example, if you

specify < 10, MultiTerm Extract will filter for all terms with fewer than 10 translations.

- **Created:** Enter the date on which the entry was created. Use the greater than [>], less than [<] or equal [=] signs to qualify the criterion.
 - **Modified:** Enter the date on which the entry was modified. Use the greater than [>], less than [<] or equal [=] signs to qualify the criterion.
- e. Specify the source and target language boxes:
- **Score:** Enter the greater than [>], less than [<] or equal [=] sign and a value to indicate the score. For example, if you specify a score of > 70, MultiTerm Extract will filter for all terms with a score that is greater than 70. The score is largely calculated using the frequency that a term appears in the document. High scores indicate probable terms.
 - **Validated:** From the **Attribute Picklist**, select **Yes** to include and **No** to exclude validated terms.
 - **File name:** Enter the name of the file on which you want to filter.
 - **Acronym:** Enter the acronyms on which you want to filter; select **Or** to separate them with a logical 'or'. You can enter the full form of the acronym if the acronym is defined in the **Acronym** box in the Term properties window. If you select **<Empty>**, and choose **NOT** as the operator, MultiTerm Extract filters for all terms that contain an acronym.
 - **Existing:** Select **Yes** to include terms that already exist in the termbase and **No** to exclude existing terms.
- f. Specify filter constraints:
- Select **Case sensitive** for the text strings you enter as filter criteria to be case-sensitive. For example, if you enter the text string ansi as a filter criteria and select the **Case sensitive** option, MultiTerm Extract will filter on ansi but not on Ansi or ANSI.
 - Separate items on the **Constraints List** with a logical 'or' by selecting **Or**.
 - Exclude specific content from the export by selecting **Not** to qualify the relevant filter constraint.
5. When you have finished defining your filter, check that the information displayed in the **Constraints List** is correct.
6. Select **OK** to confirm and to return to the Filters dialog.
- The new filter is displayed on the list and will be available for selection during the export process.

What to do next

To create another filter, select **New**. To return to your MultiTerm Extract project, select **OK**.

Editing filters

You can edit filters at any time to update them.

Procedure

1. Access **Tools > Filters** from the menu bar.

Note: You can also access the New Filter dialog from the Export Wizard. To do this, select **Create New Filter** or **Edit Filter** on the Filters page.

2. In the Filters dialog, select the filter definition to modify.
3. Select **Edit** to open the Edit Filter dialog.
4. Change the filter definition as required. Select **OK** to return to the Filters dialog. Select **OK** again to return to your MultiTerm Extract project.

Removing filters

You can remove the filters which are no longer necessary.

Procedure

1. Access **Tools > Filters** from the menu bar.
2. In the Filters dialog, select the filter definition to remove, and then select **Remove**.
3. Select **OK** to return to your MultiTerm Extract project.

5

MultiTerm Extract reference

Settings

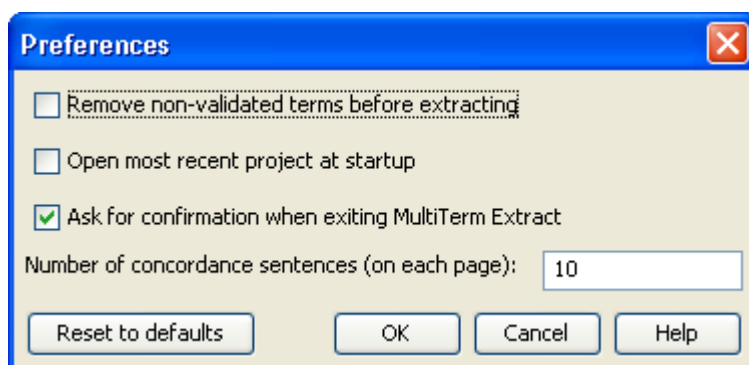
This section includes information on defining settings and preferences for SDL Trados projects.

The following areas are presented:

- Preferences
- Project settings
- File Format Settings

Preferences

Select **File > Preferences** from the menu bar to define your MultiTerm Extract project preferences. The Preferences dialog opens.



1. Select the **Remove non-validated terms before extracting** check box to be asked if MultiTerm Extract should remove any non-validated terms from the term candidate list. This option applies when you process a project for a second or subsequent time within the same session. Non-validated terms are added to the learning termbase for your project.
2. Select the **Open most recent project at startup** check box to launch the last project you worked on when you opened MultiTerm Extract.
3. Select the **Ask for confirmation when exiting MultiTerm Extract** check box to be prompted to confirm that you want to exit the application.
4. **Number of concordance sentences (on each page)** determines how many concordance examples are displayed in one Concordance window. The default is set to 10.
5. Select **Reset to defaults** to return to the MultiTerm Extract default preference settings.
6. Select **OK** when you are finished.

Project settings

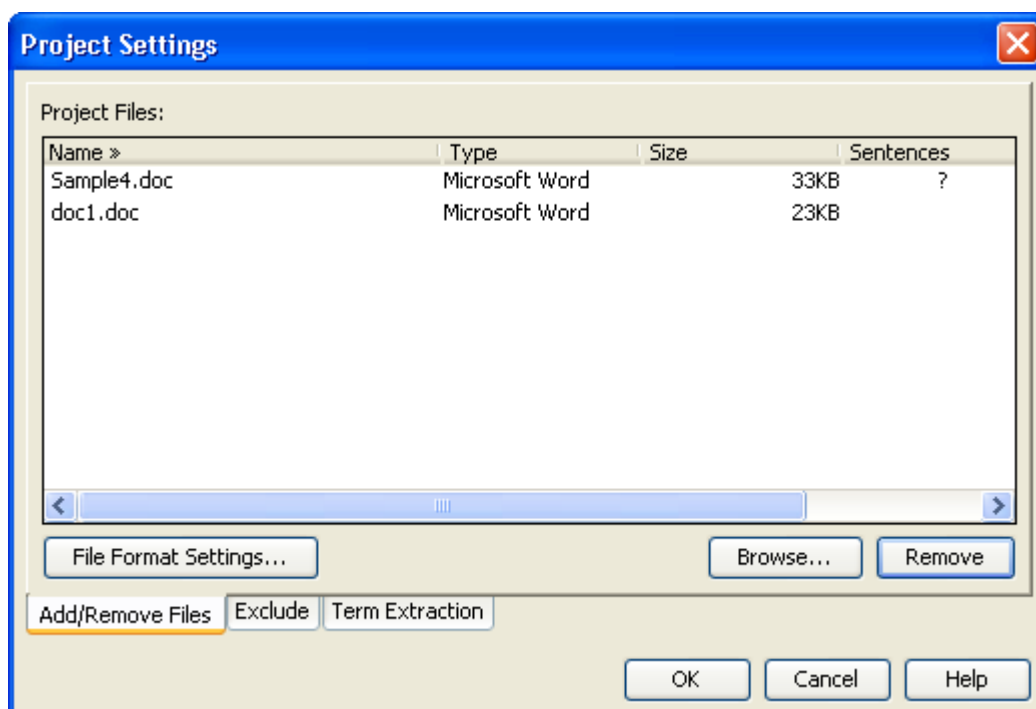
Select **Project > Settings** from the menu bar to open the Project Settings dialog box. Trados Studio collects all the information about the term extraction process.

This section explains the tabs within the Project Settings dialog box. The tabs available depend on the project type and include the following:

- **Add/Remove Files**
- **Exclude**
- **Term Extraction**
- **Dictionary Compilation**
- **Translation**

Add/Remove files tab

The **Project Files** list displays the files in the current Trados Studio project.



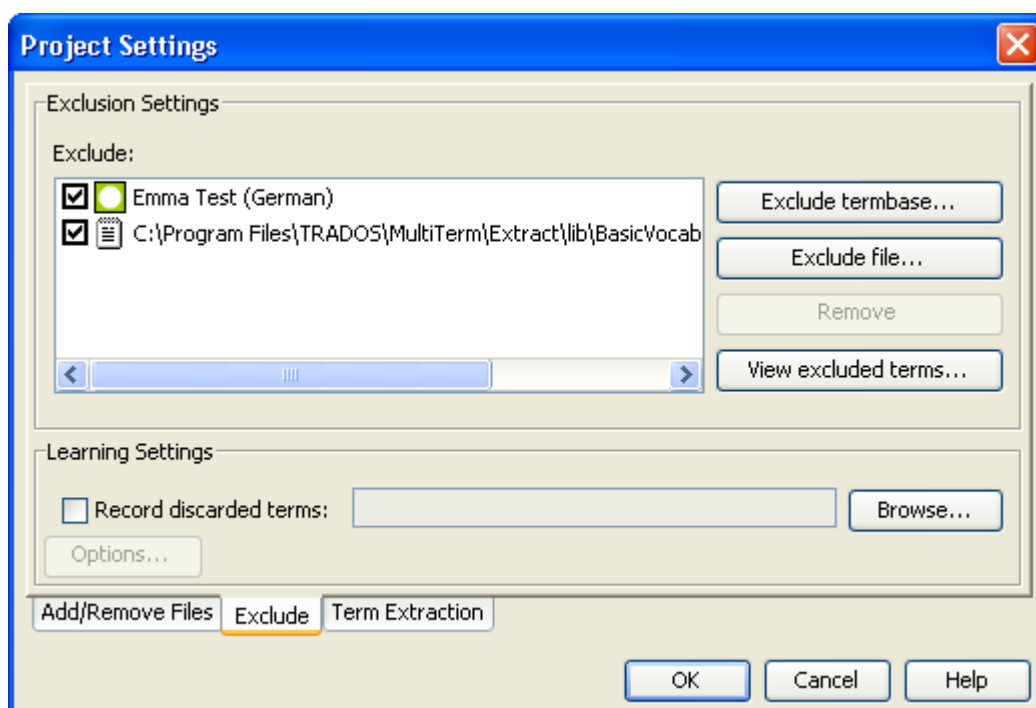
- To add more files to the project, select **Browse**.
- To remove files from the project, select the files to remove and click **Remove**. A confirmation message is displayed. You can also remove the terms belonging to the files from the project. Select **Yes** and the selected files are removed from the **Project Files** list. If you choose to remove the terms as well, they are removed from the Term window. Select **No** to return to the Project Settings dialog.

Exclude tab

On the **Exclude** tab, select termbases and exclude lists for your project. Terms in the selected termbases and exclude lists are not extracted from the files specified in your project settings.

About this task

If you want to add extracted terms to an existing MultiTerm termbase, you exclude terms from that termbase from the extraction process to avoid double entries and repeatedly validating the same terms. An exclude list is a text file containing specific terms to not include in the extraction process.



Procedure

1. Exclude extraction of terms from a termbase in your project:
 - a. Select **Exclude termbase**.
 - b. In the Choose Exclude Termbase dialog, select the termbase to exclude and select **OK**.
 - c. In the Choose Language to Exclude dialog, select the language of the terms to exclude. This will usually be the same language as the source language of your project.

Note: If you select a remote termbase, select **Remote Login** to open the Server Login dialog where you can specify MultiTerm Server computer and login details.

- d. Select **OK** to return to the Project Settings dialog.
2. Set excluded lists:

- a. Select **Exclude file** to specify lists of terms to not include in the extraction process. The Select dialog is displayed.
- b. Browse to the exclude list and select **Select** to return to the Project Settings dialog.

Note:

- View the excluded terms by selecting **View excluded terms**.
- Remove an exclude list by selecting a file and selecting **Remove**.

Defining the learning settings

Trados Studio uses the learning termbase to collect all term candidates that you delete, and thus reject, as term candidates during the term extraction process. The learning termbase is updated each time you delete a term during term extraction; terms that exist in the learning termbase are not extracted again. In this way, Trados Studio avoids displaying unwanted terms in the Term window.

About this task

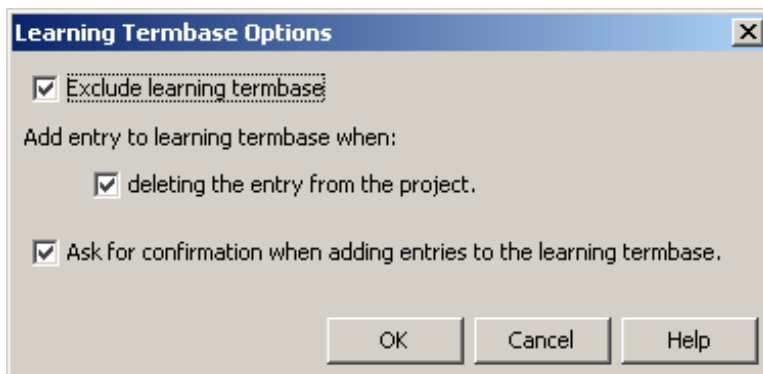
You can use the learning termbase in the current project and in subsequent projects as an exclude termbase. Trados Studio does not extract any terms that exist in the exclude termbase during term extraction.

Procedure

1. Select the **Record discarded terms** check box to choose a database that will store any terms you reject.
2. Select **Browse** to select the database or to create a new one. In the Choose Learning Termbase dialog:
 - a. Select the termbase from the **Termbases** list and select **OK**.
 - b. Select **Settings** to specify the termbase location.

Note: Specify the MultiTerm Server computer if you select a remote termbase.

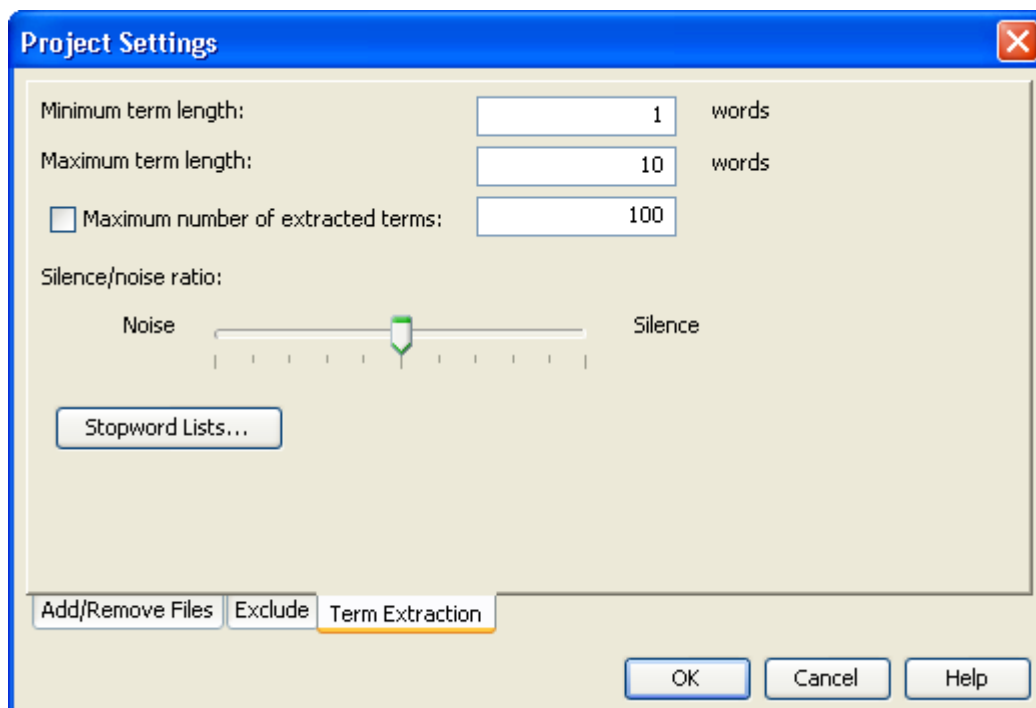
- c. Select **New termbase** to create a new learning termbase.
 - d. In the Create Learning Termbase dialog:
 - a. Enter the name of the termbase in the **Termbase name** box.
 - b. Select the languages you require from the **Select languages** list box.
 - c. Select **Create** to set up the new termbase.
3. Select **Options** to display the Learning Termbase Options dialog:



- To update the learning termbase every time you delete a term candidate from a project, select the appropriate option.
 - To receive a confirmation message if entries are being added to the learning termbase, choose the appropriate option.
4. Select **OK** to return to **Project Settings**.

Term Extraction tab

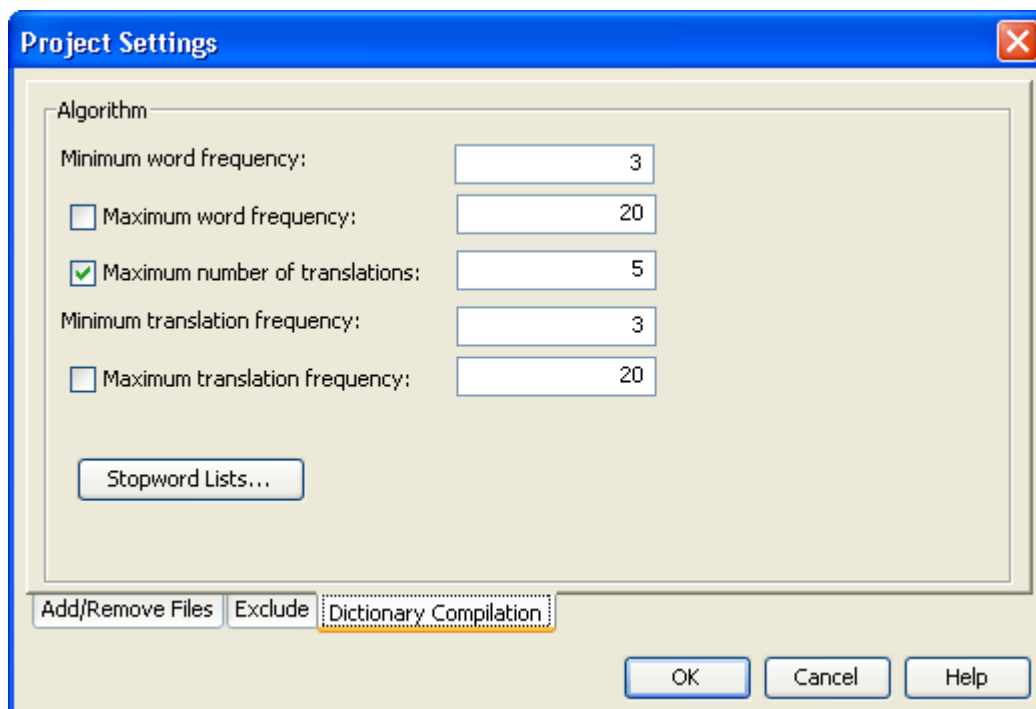
You can customize the following term extraction algorithm settings to fine tune the extraction process.



- **Minimum term length** indicates the minimum number of words required to form a term. The default setting is 1.
- **Maximum term length** indicates the maximum number of words that a term may have. The default setting is 10.

- **Maximum number of extracted terms** indicates the maximum number of terms that Trados Studio will extract. The default setting is 100.
- **Silence/noise ratio:** The higher the silence ratio, the fewer term candidates are extracted. However, these term candidates are generally of higher quality. The higher the noise ratio, the more term candidates are extracted. However, it is likely that these will include a number of lower quality candidates.

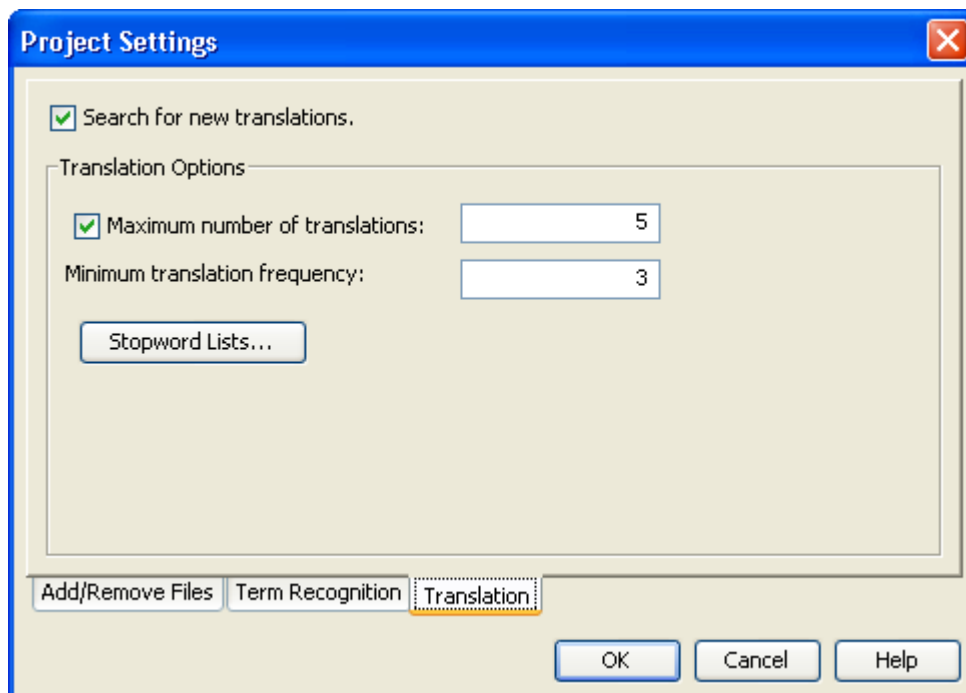
Dictionary Compilation tab



- In the **Minimum word frequency** box, specify the minimum number of times a term and its translation must be shown in a text before being added to the term candidate list. The default setting is 3.
- Select **Maximum word frequency** to specify the maximum number of times a term and its translation can appear in a text before being excluded from the term candidate list. The default setting is 20.
- Select **Maximum number of translations** to specify the maximum number of possible translations that Trados Studio will extract for a given term. This option is active by default and the default setting is 5.
- In the **Minimum translation frequency** box, specify the minimum number of times a term must be translated by its target in order for the target term to be added to the term candidate list. The default setting is 3.
- In the **Maximum translation frequency** box, specify the maximum number of times a term may be translated by its target term before the target term is excluded from the term candidate list. The default setting is 20.
- Click **Stopword Lists** to set the language-specific list(s) containing articles, pronouns and other items that are to be excluded from the extraction process.

Translation tab

You can customize the following translation algorithm settings to fine tune the translation process.



- Select the **Search for new translations** check box.
- Select **Maximum number of translations** to set the maximum number of possible translations that Trados Studio will extract for a given term. This option is active by default and the default setting is 5.
- In the **Minimum translation frequency** box, specify the minimum number of times a term must be translated by its target term in order for the target term to be added to the term candidate list. The default setting is 3.
- Click **Stopword Lists** to set the language-specific list(s) containing articles, pronouns and other items that are to be excluded from the extraction process.

File format settings

To extract terms from HTML, SGML, XML, ASP or JSP files, you must specify a settings file (*.ini) before starting the term extraction process.

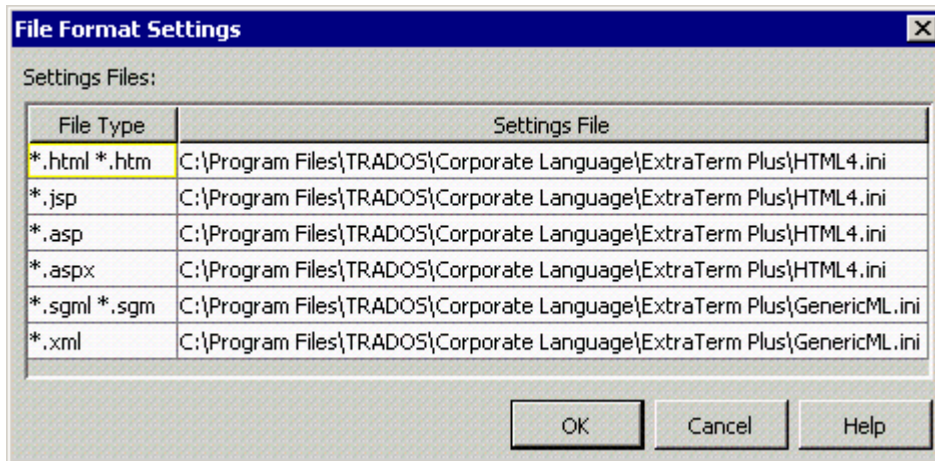
MultiTerm Extract needs the settings file to interpret these files correctly and to distinguish between tags and text. If you do not have a settings file, you must create one using TagEditor or Translator's Workbench.

Note: MultiTerm Extract needs the settings file to interpret these files correctly and to distinguish between tags and text. If you do not have a settings file, you must create one using TagEditor or Translator's Workbench.

Selecting a settings file

Procedure

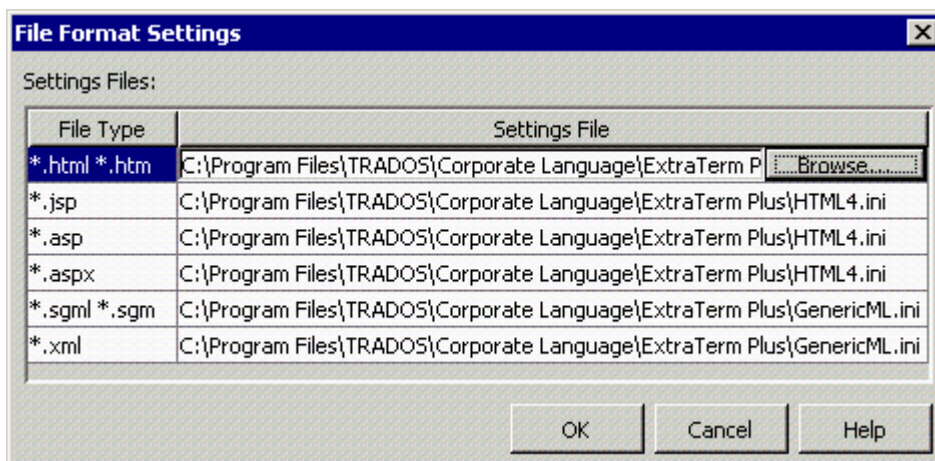
1. Access **Tools > File Format Settings** from the menu bar.



Note: You can also access the File Format Settings dialog from the New Project Wizard. On the **Add files** to this project page, select **File Format Settings**. In the File Format Settings dialog, select a specific settings file for the current project.

SDL Trados provides default settings files for several tagged formats, including *.html, *.htm, *.jsp, *.asp, *.aspx, *.sgml, *.sgm and *.xml files. The default settings files are listed in the **Settings File** column.

2. In the File Format Settings dialog, under **File Type**, identify the file format for which you want to specify a settings file, and then select in the corresponding cell in the **Settings File** column. The relevant cell in the **File Type** column is highlighted and a **Browse** button is displayed opposite in the **Settings File** column.



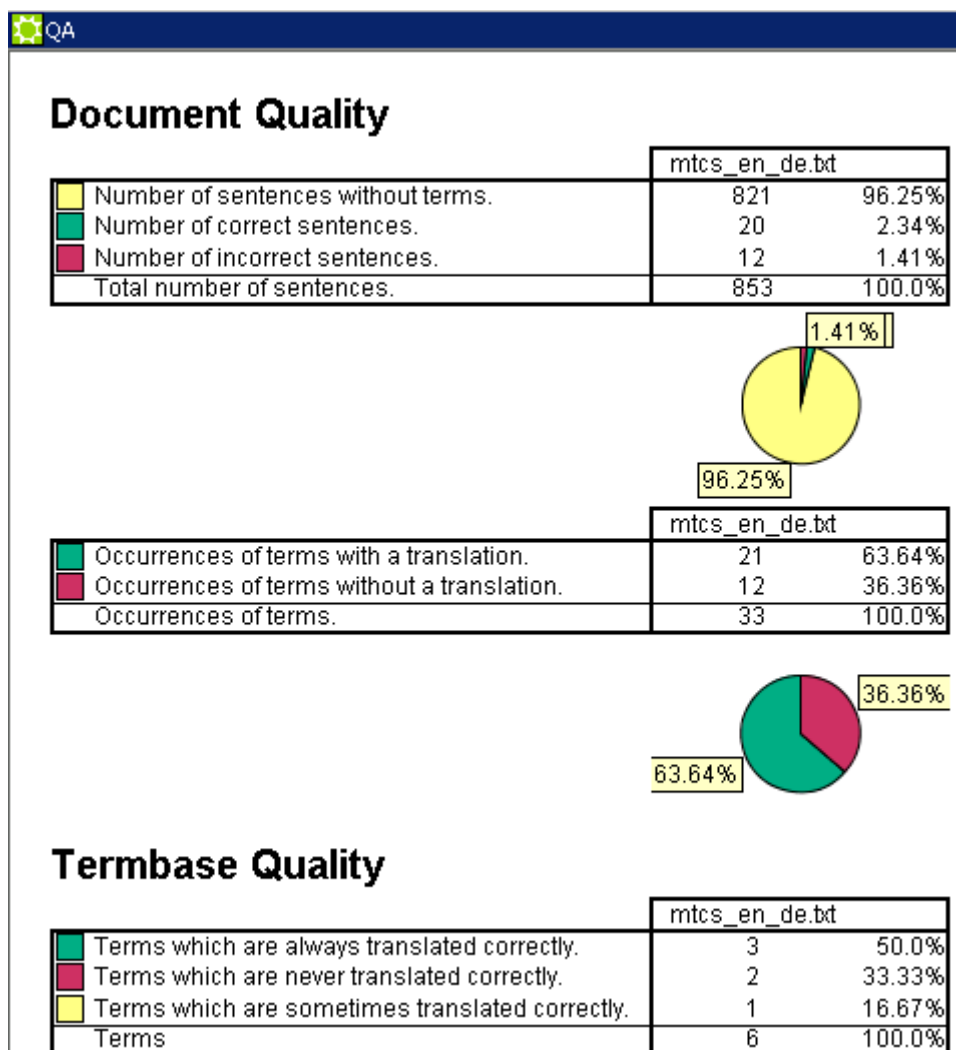
3. Select **Browse** to open the Choose Settings File dialog where you can browse to select the settings file. Select **Set** to return to the File Format Settings dialog. The path to the settings file is shown in the **Settings File** column.

4. Select **OK** to confirm and to return to the main program window.

QA Statistics

After you have processed a **QA Project**, a QA report provides statistical information about the terms in project files and existing terms in the MultiTerm termbase for the project.

The statistics are related to the quality of the project files or translated texts and the quality of the MultiTerm termbase. In particular, the report contains a number of tables and pie charts that are explained in the following section.



Document quality

The table refers to source sentences containing terms that also exist in the project termbase.

- **Number of sentences without terms:** Number of source sentences that do not contain any terms that are stored in the project termbase.
- **Number of correct sentences:** Number of correct source language sentences containing terms that also exist in the project termbase. A 'correct' sentence is one whose target language terms are identical to those in the termbase.
- **Number of incorrect sentences:** Number of incorrect source language sentences containing terms that also exist in the project termbase. An 'incorrect' sentence is one in which at least one of the target language terms is different to its equivalent in the termbase.
- **Total number of sentences:** The total number of source language sentences.
- **Occurrences of terms with a translation:** Number of source language terms for which the target language term is identical to the one in the termbase.
- **Occurrences of terms without a translation:** Number of source language terms for which the target language term is different to its equivalent in the termbase.
- **Occurrences of terms:** Number of source language terms that exist in both the text and the termbase.

Termbase quality

The information in this table shows the extent to which terms in the translated text match the translations given in the project termbase.

- **Terms which are always translated correctly:** Number of source language terms whose target language terms are identical to those in the project termbase.
- **Terms which are never translated correctly:** Number of source language terms whose target language terms are never identical to those in the project termbase.
- **Terms which are sometimes translated correctly:** Number of source language terms whose target language terms are sometimes identical and sometimes different to those in the project termbase.
- **Terms:** The total number of source language terms.

Keyboard shortcuts

The following table shows the keyboard shortcuts for use with Trados Studio.

Keyboard Shortcut	Action
Menus	
[Ctrl]+[N]	Creates a new project.

Keyboard Shortcut	Action
[Ctrl]+[O]	Opens an existing project.
[Ctrl]+[W]	Closes a project.
[Ctrl]+[S]	Saves a project.
[Ctrl]+[A]	Saves a project under a different name.
[Ctrl]+[E]	Exports terms. In a QA Project this exports suspect sentences.
[Ctrl]+[Z]	Undoes the last action.
[Ctrl]+[Y]	Redoes the last action.
F7	Processes files.
Term Window	
[Spacebar]	Validates the current term candidate.
[Delete]	Deletes the selected term from the term candidates list.
[F2]	Opens a term in the source and/or target column for editing.
[Ctrl]+[Insert]	Inserts a new translation of a source term in the target column of the Term window.
Text Window	
[Spacebar]	Selects the term candidate or translation at the cursor.
[Delete]	Deletes the current term if it is part of the term candidates list.
[Ctrl]+[Insert]	If source sentence text is selected, this command adds selected text in a source sentence as a new term. If target sentence text is selected, this command adds selected text in a target sentence as a new translation.
[F3]	If some text is selected, Trados Studio carries out a concordance search using this text.
[Tab]	In the QA Project , goes to the next term.
[Shift]+[Tab]	In the QA project , goes to the previous term.
[Ctrl]+[Tab]	In the QA project , moves from one suspect sentence to the next.
[Alt]+[Enter]	Displays the properties of the current term in the Term properties window.
Concordance Window	
[Spacebar]	Selects the term candidate or translation at the cursor.
[Delete]	Deletes the current term if it is part of the term candidates list.
[F3]	If some text is selected Trados Studio carries out a concordance search using this text.
[Ctrl]+[Insert]	Adds selected text as new term.
[Shift]+[Tab]	Goes to the previous term in the Concordance window.

Keyboard Shortcut	Action
[Tab]	Goes to the next term in the Concordance window.
[Alt]+[Enter]	Displays the properties of the current term in the Term properties window.
Other Shortcuts	
[Ctrl]+[Tab]	Switches between internal frames in the Term, Term properties and Concordance windows.

6

Acknowledgments

MultiTerm includes open source or similar third-party software.

Crc32C.NET.signed

Version: 1.0.5

Vendor: Robert Važan

Copyright: Copyright (c) 2014-2020, Robert Važan

License type: BSD-3-Clause

License details: <https://github.com/robertvazan/crc32c.net/blob/master/LICENSE>

Microsoft.ApplicationInsights

Version: 2.12.1

Vendor: Microsoft

Copyright: Copyright (c) 2015 Microsoft

License type: MIT

License details: <https://github.com/microsoft/ApplicationInsights-dotnet/blob/2.12.1/LICENSE>

CommandLineParser

Version: 1.9.71

Vendor: Giacomo Stelluti Scala

Copyright: Copyright (c) 2005 - 2013 Giacomo Stelluti Scala

License type: MIT

License details: <https://github.com/commandlineparser/commandline/blob/v1.9.71.2/doc/LICENSE>

Microsoft.AspNet.WebApi.Client

Version: 5.2.7

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: Apache 2.0

License details: <https://github.com/aspnet/AspNetWebStack/blob/v3.2.7/LICENSE.txt>

Microsoft.AspNetCore.SignalR.Client

Version: 1.1.0

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: Apache 2.0

License details: <https://github.com/aspnet/SignalR/blob/1.1.0/LICENSE.txt>

Microsoft.IdentityModel.Protocol.Extensions

Version: 1.0.4.403061554

Vendor: Microsoft

Copyright: Copyright (c) Microsoft Corporation

License type: MIT

License details: <https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet/blob/dev/LICENSE.txt>

System.IdentityModel.Tokens.Jwt

Version: 6.11.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet/blob/dev/LICENSE.txt>

Microsoft.IdentityModel.Tokens

Version: 6.11.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet/blob/6.7.1/LICENSE.txt>

YamlDotNet

Version: 8.1.1.0

Vendor: Antoine Aubry

Copyright: Copyright (c) Antoine Aubry and contributors 2008 - 2019

License type: MIT

License details: <https://github.com/aaubry/YamlDotNet/blob/v8.1.2/LICENSE.txt>

NETStandard.Library

Version: 2.0.3

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: MIT

License details: <https://github.com/dotnet/standard/blob/v2.0.3/LICENSE.TXT>

Autofac

Version: 4.8.1

Vendor: Autofac

Copyright: Copyright © 2015 Autofac Contributors

License type: MIT

License details: <https://github.com/autofac/Autofac/blob/v4.8.1/LICENSE>

HtmlAgilityPack

Version: 1.11.34.0

Vendor: ZZZ Projects

Copyright: Copyright © ZZZ Projects Inc.

License type: MIT

License details: <https://github.com/zzzprojects/html-agility-pack/blob/v1.11.16/LICENSE>

Xliff.OM

Version: 1.0.2

Vendor: RyanKi

Copyright: Copyright 2016 RyanKi

License type: MIT

License details: <https://github.com/microsoft/XLIFF2-Object-Model/blob/master/LICENSE.txt>

murmurhash-signed

Version: 1.0.3.0

Vendor: Darren Kopp

Copyright: Copyright 2013 Darren Kopp

License type: Apache 2.0

License details: <https://github.com/darrenkopp/murmurhash-net/blob/master/LICENSE.md>

System.IO.Abstractions

Version: 13.2.38.0

Vendor: Tatham Oddie

Copyright: Copyright © Tatham Oddie 2010

License type: MIT

License details: <https://github.com/System-IO-Abstractions/System.IO.Abstractions/blob/v4.2.17/LICENSE>

Flee

Version: 1.2.2

Vendor: Muhammet Parlak

Copyright: Copyright 2017 Muhammet Parlak

License type: L-GPL

License details: <https://github.com/mparlak/Flee>

PowerCollections

Version: 1.0.0.0

Vendor: Wintellect

Copyright: Copyright 2015 Wintellect

License type: EPL

License details: <https://www.nuget.org/packages/Stakata.Wintellect.PowerCollections/1.0.4/License>

ANTLR 3 Runtime

Version: 3.1.3

Vendor: Terence Parr

Copyright: Copyright (c) 2011 The ANTLR Project

License type: BSD

License details: <https://github.com/antlr/antlr3/blob/master/LICENSE.txt>

CachedImage

Version: 0.1.8

Vendor: Haridas Pachuveetil

Copyright: Copyright (c) 2014 Haridas Pachuveetil

License type: MIT

License details: <https://github.com/floydpink/CachedImage/blob/main/LICENSE>

Microsoft.AspNetCore.JsonPatch

Version: 5.0.7

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: Apache 2.0

License details: <https://github.com/dotnet/aspnetcore/blob/1.1.1/LICENSE.txt>

Microsoft.Extensions.DependencyInjection.Abstractions

Version: 5.0.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/extensions/blob/9bc79b2f25a3724376d7af19617c33749a30ea3a/LICENSE.txt>

Microsoft.Extensions.DependencyModel

Version: 2.0.4

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: MIT

License details: <https://github.com/dotnet/core-setup/blob/v2.0.4/LICENSE.TXT>

Microsoft.IdentityModel.JsonWebTokens

Version: 6.11.0.0

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: MIT

License details: <https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet/blob/5.6.0/LICENSE.txt>

Microsoft.IdentityModel.Logging

Version: 6.11.1.0

Vendor: Microsoft

Copyright: Copyright (c) .NET Foundation and Contributors

License type: MIT

License details: <https://github.com/AzureAD/azure-activedirectory-identitymodel-extensions-for-dotnet/blob/5.6.0/LICENSE.txt>

log4net

Version: 2.0.8

Vendor: The Apache Software Foundation

Copyright: Copyright 2004-2017 The Apache Software Foundation

License type: Apache 2.0

License details: <https://github.com/apache/logging-log4net/blob/rel/2.0.8/LICENSE>

Markdig.Signed

Version: 0.18.3

Vendor: Alexandre Mutel

Copyright: Copyright (c) 2018-2019, Alexandre Mutel

License type: BSD-2-Clause

License details: <https://github.com/xoofx/markdig/blob/0.18.3/license.txt>

NLog

Version: 4.6.7

Vendor: Jarek Kowalski, Kim Christensen, Julian Verdurmen

Copyright: Copyright (c) 2004-2020 NLog Project - <https://nlog-project.org/>

License type: BSD-3-Clause

License details: <https://github.com/NLog/NLog/blob/v4.6.7/LICENSE.txt>

SharpZipLib

Version: 1.2.0

Vendor: ICSharpCode

Copyright: Copyright © 2000-2018 SharpZipLib Contributors

License type: MIT

License details: <https://github.com/icsharpcode/SharpZipLib/blob/v1.2.0/LICENSE.txt>

System.Data.SQLite

Version: 1.0.111.0

Vendor: SQLite

Copyright: Public domain

License type: Public domain

License details: <https://www.sqlite.org/copyright.html>

ICU

Version: 59.1.15.0

Vendor: SIL International

Copyright: Copyright (c) 2016-2017 SIL International

License type: ICU

License details: <https://github.com/unicode-org/icu/blob/release-59-1/icu4c/LICENSE>

DocumentFormat.OpenXml

Version: 2.8.1

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/OfficeDev/Open-XML-SDK/blob/v2.8.1/LICENSE>

System.ValueTuple

Version: 4.5.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Collections.Immutable

Version: 5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/runtime/blob/v5.0.0/LICENSE.TXT>

System.Reactive

Version: 4.3.2

Vendor: .NET Foundation and Contributors

Copyright: Copyright (c) .NET Foundation and Contributors.

License type: MIT

License details: <https://github.com/dotnet/reactive/blob/rxnet-v4.3.2/LICENSE>

Newtonsoft.Json

Version: 12.0.2

Vendor: James Newton-King

Copyright: Copyright © James Newton-King 2008

License type: MIT

License details: <https://github.com/JamesNK/Newtonsoft.Json/blob/12.0.2/LICENSE.md>

SmartThreadPool

Version: 2.2.6.0

Vendor: Ami Bar

Copyright: Copyright © Ami Bar

License type: MS-PL

License details: <https://github.com/amibar/SmartThreadPool/blob/v2.2.6/LICENSE>

SimpleInjector

Version: 5.3.0.0

Vendor: Simple Injector Contributors

Copyright: Simple Injector Contributors 2010 - 2020

License type: MIT

License details: <https://github.com/simpleinjector/SimpleInjector/blob/v4.9/LICENSE>

Microsoft.Xaml.Behaviors.Wpf

Version: 1.1.19.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/microsoft/XamlBehaviorsWpf/blob/v1.1.19/LICENSE>

Microsoft.Extensions.Logging.Abstractions

Version: 5.0.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/extensions/blob/2.2.0/LICENSE.txt>

MaterialDesignThemes.MahApps

Version: 0.0.11

Vendor: James Willock

Copyright: Copyright 2015 James Willock/Mulholland Software Ltd

License type: MS-PL

License details: <https://www.nuget.org/packages/MaterialDesignThemes.MahApps/0.0.11>

OpenXmlPowerTools

Version: 4.5.3.0

Vendor: Eric White

Copyright: Copyright © Eric White

License type: MIT

License details: <https://github.com/OfficeDev/Open-Xml-PowerTools/blob/vNext/LICENSE>

WatiN

Version: 2.1.0.0

Vendor: Jeroen van Menen

Copyright: Copyright © Jeroen van Menen

License type: Apache 2.0

License details: <https://www.nuget.org/packages/WatiN/2.1.0>

System.Threading.Tasks.Extensions

Version: 4.5.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Security.Cryptography.X509Certificate

Version: 4.3.2.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Security.Cryptography.Algorithms

Version: 4.3.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Reflection.TypeExtensions

Version: 4.7.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Linq.Queryable

Version: 4.3.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.IO.FileSystem.Primitives

Version: 4.3.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Memory

Version: 4.5.4.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Numerics.Vectors

Version: 4.5.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System Buffers

Version: 4.5.1.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

System.Runtime.CompilerServices.Unsafe

Version: 5.0.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: MIT

License details: <https://github.com/dotnet/corefx/blob/master/LICENSE.TXT>

SharpCompress

Version: 0.26.0

Vendor: Adam Hathcock

Copyright: Adam Hathcock

License type: MIT

License details: <https://github.com/adamhathcock/sharpcompress/blob/0.26/LICENSE.txt>

Sdl.MultiSelectCombobox

Version: 1.0.17

Vendor: RWS

Copyright: Copyright © RWS

License type: Apache 2.0

License details: <https://github.com/sdl/Multiselect-ComboBox/blob/master/LICENSE>

Microsoft.WindowsAPICodePack.Shell

Version: 1.1.0.0

Vendor: NanaLich

Copyright:

License type:

License details:

icu.net

Version: 2.7.1.0

Vendor: SIL International

Copyright: Copyright © 2007-2019 SIL International

License type: MIT

License details: <https://github.com/sillsdev/icu-dotnet/blob/v2.5.4/LICENSE>

Microsoft.Extensions.Http

Version: 5.0.0.0

Vendor: Microsoft

Copyright: © Microsoft Corporation. All rights reserved.

License type: Apache 2.0

License details: <https://github.com/aspnet/HttpClientFactory/blob/2.2.0/LICENSE.txt>

MahApps.Metro

Version: 1.5.0

Vendor: Jan Karger, Dennis Daume, Brendan Forster, Paul Jenkins, Jake Ginnivan, Alex Mitchell

Copyright: Copyright © 2021 .NET Foundation and Contributors. All rights reserved.

License type: MIT

License details: <https://github.com/MahApps/MahApps.Metro/blob/1.5.0/LICENSE>

NQuant

Version: 1.0.3

Vendor: Matt Wrock

Copyright: Copyright Matt Wrock 2011

License type: Apache 2.0

License details: <https://github.com/philjones/nquant/blob/master/License.txt>