Term Extraction

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memoq fest
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Agenda

The Basics
- Manual extraction
- Term extraction feature

The Process
Working through the
list of candidates
Numbers and own experience

The Settings
Extraction settings

The Wish list

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The Basics

Ways to extract terms

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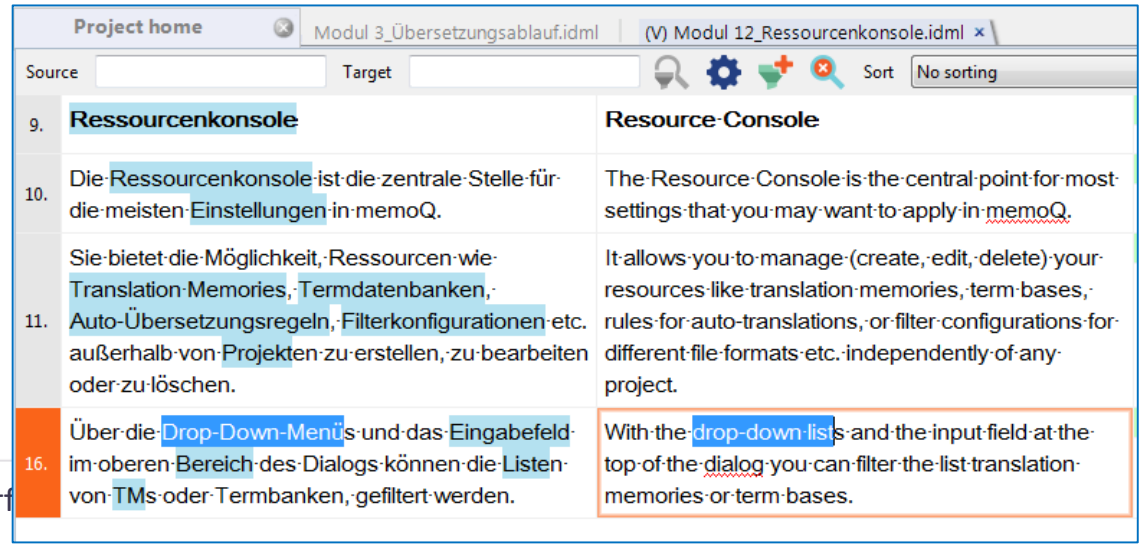
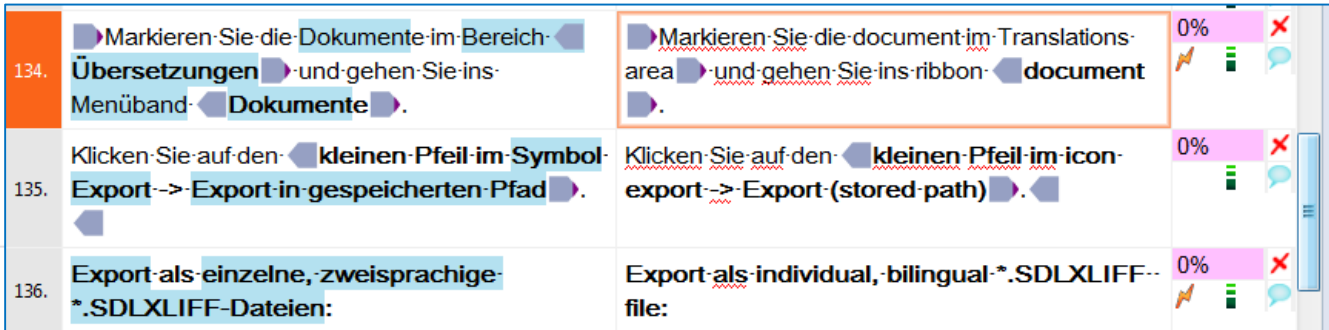
The manual process

- Set up a project with a term base
- Open the document (or documents as a view) in the editor.
- Click through all segments and see how many terms are already found in the term base (marked in blue)
- Add terms manually with CTRL-Q (term pairs if you go through an already translated document)



The manual process

- Angelika's experience:
  - If your documents contain up to 20,000 words in total the process to collect terms manually takes about as much time as going through a candidates' list from the extraction.
- To minimize the number of segments to go through in the editor:
  - Run a pre-translation with the fragment assembling using a term base and non-translatable list only (without TM). These segments already contain known terms and will probably not contain many more term candidates.

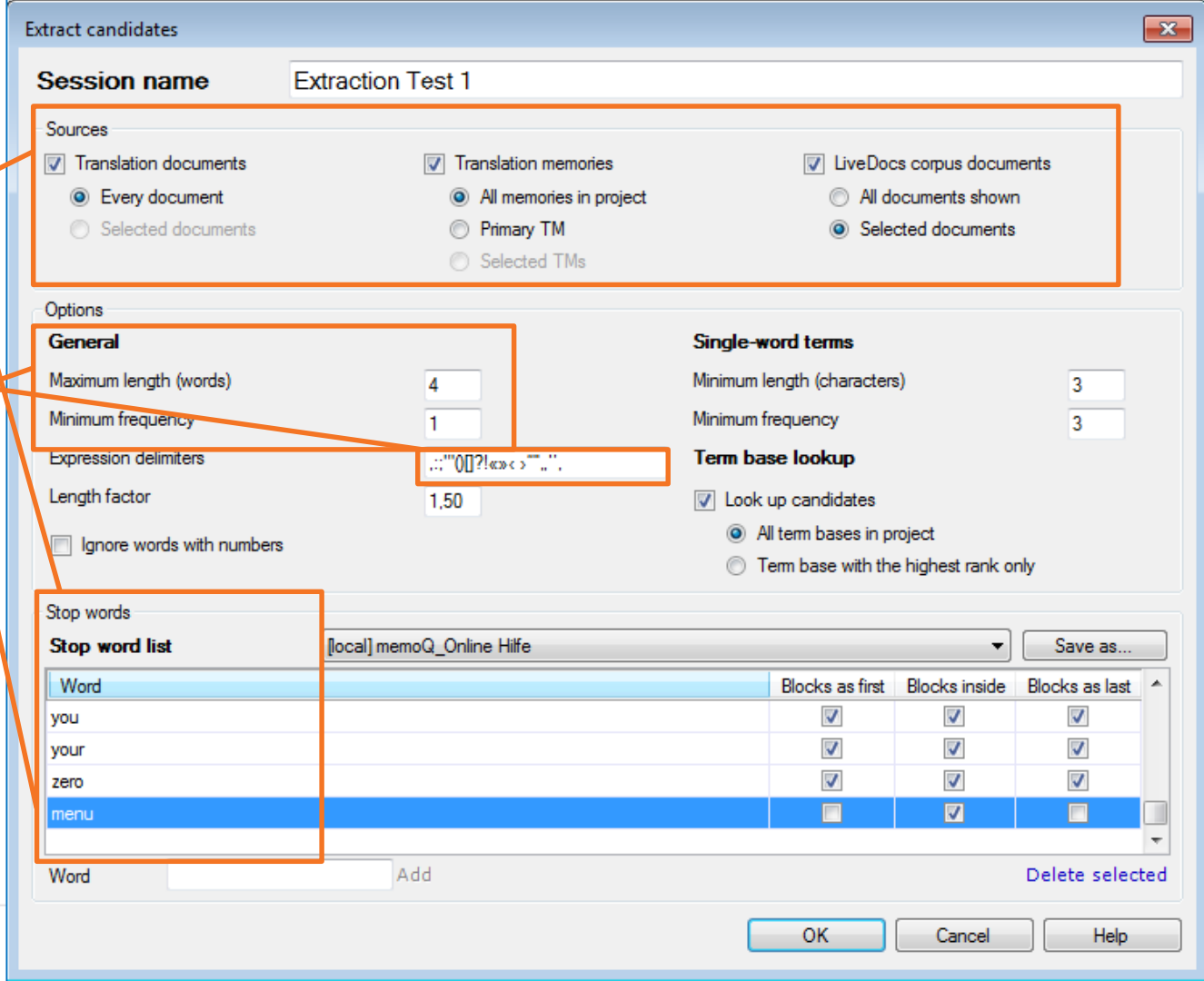


Term Extraction Module

- Statistical extraction from source language
- From
  - Translation documents
  - TMs
  - LiveDocs corpora (alignments, translation documents saved to LiveDocs and monolingual documents)
- Exports to
  - term bases
  - Excel
  - TaaS (term plug-in)

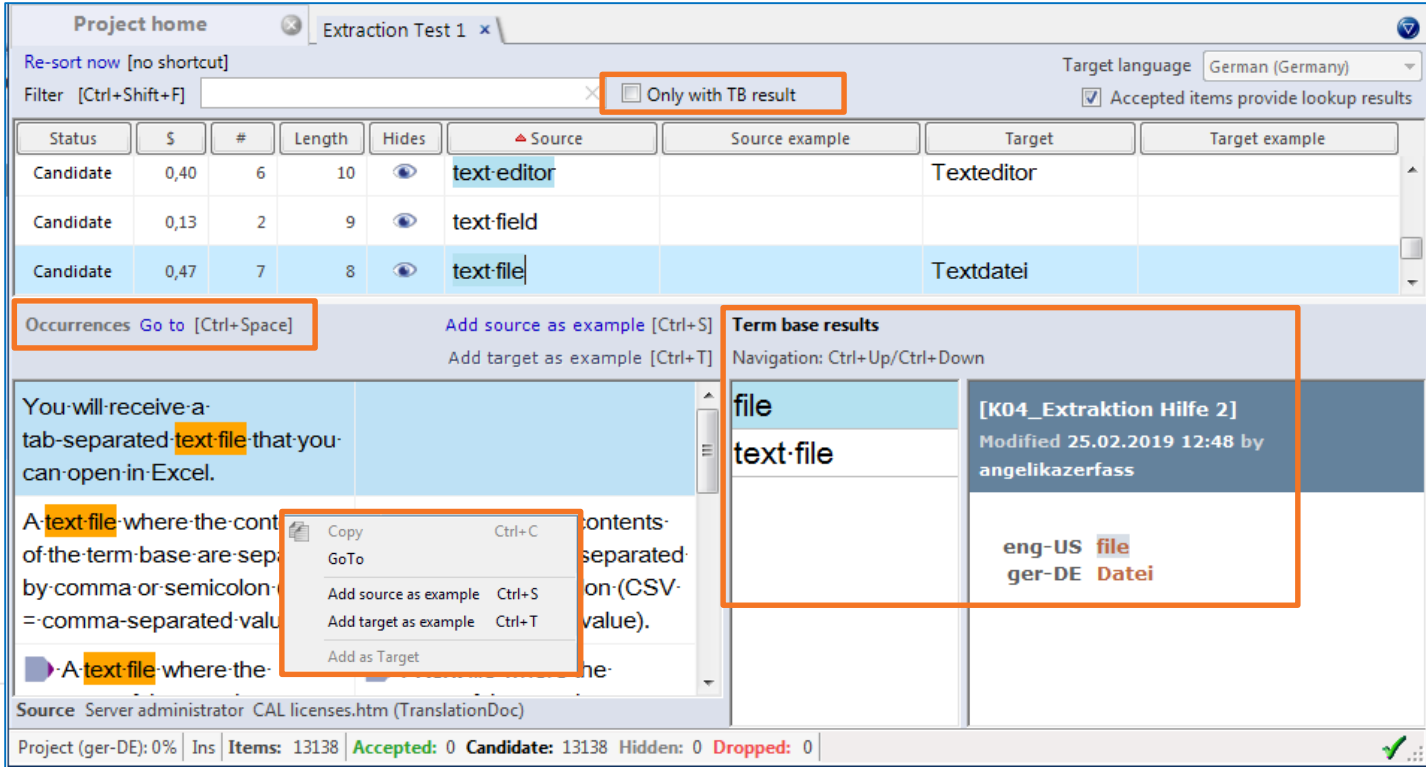
The Settings

- Check the text for the characters that come up between terms.
- Block as…
  - Finds "menu" as part of a term only, if the word "menu" appears at the beginning or end of the term *menu item, edit menu*



The List of Candidates

- Existing terms marked in blue / show only candidates with known terms
- Term base entries visible
- Go to feature to jump to source file
- Right-click to add segments as examples



The List of Candidates

- Accept or drop a term
- Edit the terms
- Sort the list by
  - the number of characters within the term
  - the frequency of terms/term combinations
  - alphabetically
- Export accepted terms to term base or Excel
- Send dropped single-word terms to the stop word list

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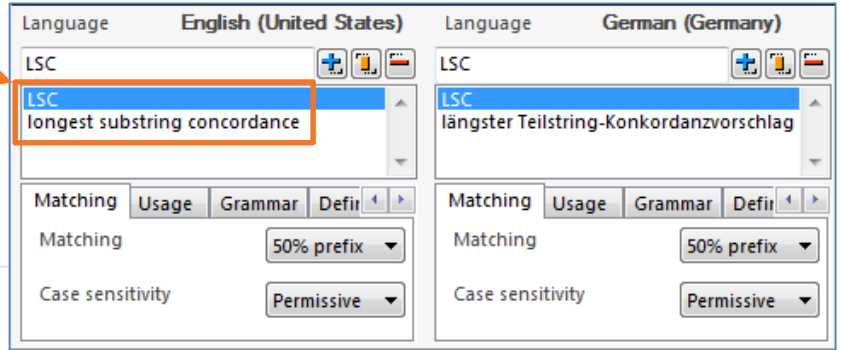
The Work in the Extraction List

- Run several extractions with different settings (settings cannot be changed once the extraction has run on the files).
- Accept AND drop terms as you go. If you don't mark terms as dropped and then re-sort the list, you might have to look at the same entries twice.

The Work in the Extraction List

- To add a synonym, use a semicolon and a space to separate the terms.

Status	$	#	Length	Hides	Source
Accepted	1,28	41	9		licensing
Accepted	0,18	2	15		licensing·method
Accepted	0,32	2	19		LSC;·longest·substring·concordance



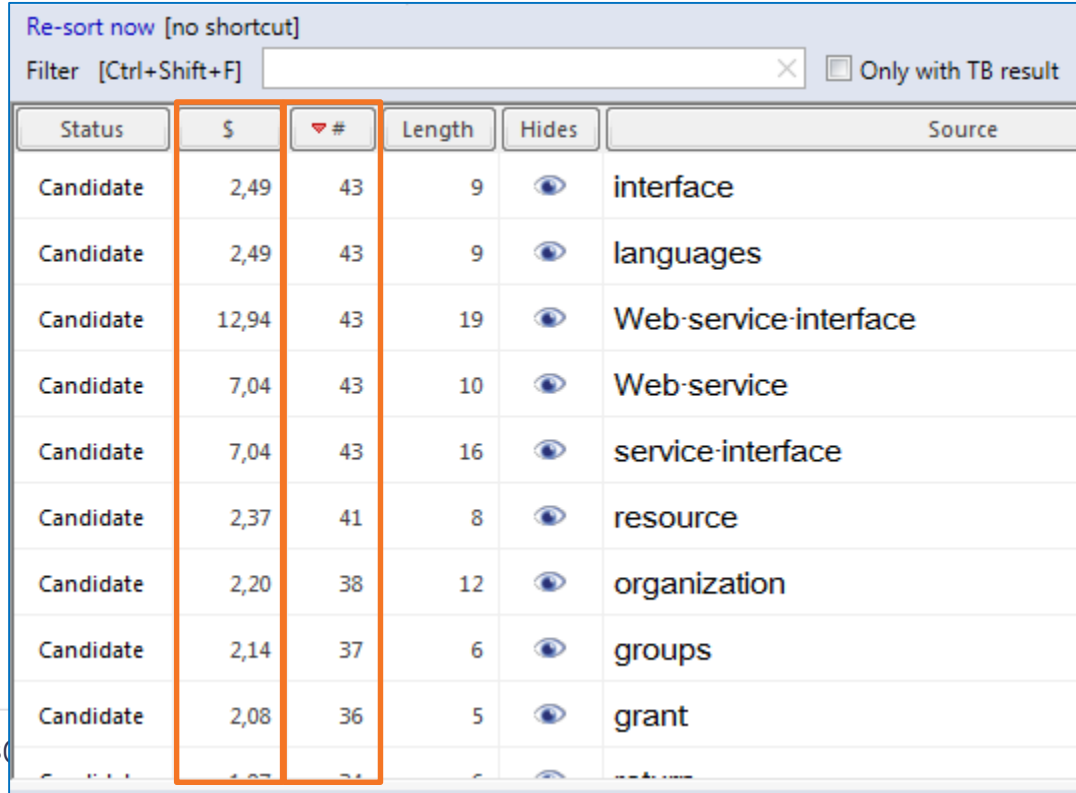
The Work in the Extraction List

- Sort by length
  - The longer the term, the higher the probability that it is a good term candidate
- Sort alphabetically
  - This also helps to find slightly different spellings of a term or highlight general inconsistencies, like the use of hyphens

Status	$	#	Length	Hides	Source
Candidate	0,08	1	15		Leasingabkommen
Candidate	0,08	1	16		Leasing-Laufzeit
Candidate	0,08	1	22		Leasingverpflichtungen
Candidate	0,25	3	15		Leasingverträge
Candidate	0,08	1	16		Leasing-Verträge
Candidate	0,08	1	16		Leasingzahlungen

The Work in the Extraction List

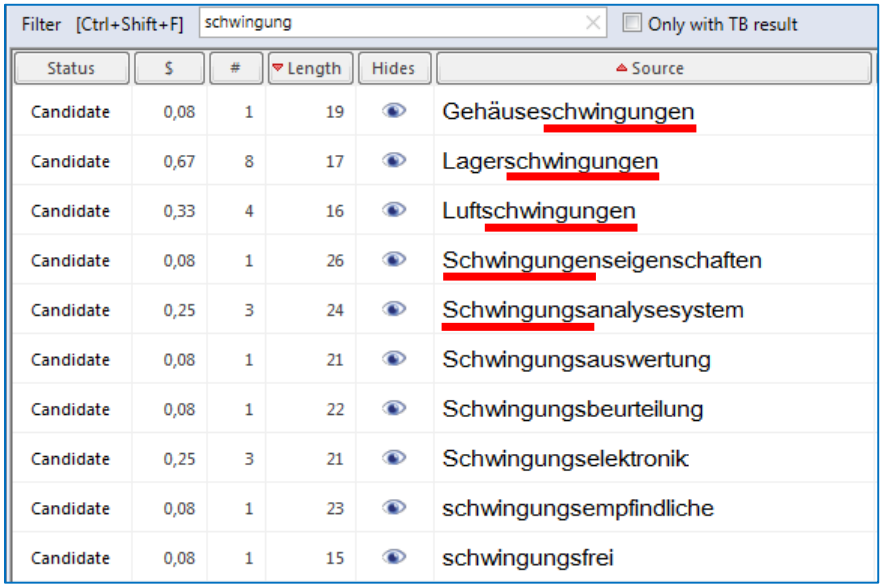
- Sort by frequency
  - If a full extraction is not possible (restraints on time/budget), concentrate on the most frequent terms.
- Sort by memoQ indicator ($)
  - The higher the number, the more memoQ thinks that this is a good candidate.



Status	$	#	Length	Hides	Source
Candidate	2,49	43	9		interface
Candidate	2,49	43	9		languages
Candidate	12,94	43	19		Web-service-interface
Candidate	7,04	43	10		Web-service
Candidate	7,04	43	16		service-interface
Candidate	2,37	41	8		resource
Candidate	2,20	38	12		organization
Candidate	2,14	37	6		groups
Candidate	2,08	36	5		grant

The Work in the Extraction List

- Filter for a specific part
  - Find all terms that contain this part
  - Drop all terms you don't want (Prevents the user from trying to confirm the same term several times)



Status	$	#	Length	Hides	Source
Candidate	0,08	1	19		Gehäuseschwingungen
Candidate	0,67	8	17		Lagerschwingungen
Candidate	0,33	4	16		Luftschwingungen
Candidate	0,08	1	26		Schwingungenseigenschaften
Candidate	0,25	3	24		Schwingungsanalysesystem
Candidate	0,08	1	21		Schwingungsauswertung
Candidate	0,08	1	22		Schwingungsbeurteilung
Candidate	0,25	3	21		Schwingungselektronik
Candidate	0,08	1	23		schwingungsempfindliche
Candidate	0,08	1	15		schwingungsfrei

The Work in the Extraction

- Search for specific things, like hyphens, slashes or ampersands.

There might be good candidates.

Status	$	#	Length	Hides	Source
Candidate	0,33	4	27		Anti-Korruptions-Leitlinien
Candidate	0,08	1	27		Grundlast-/Wechselschaltung
Candidate	0,08	1	27		Argon-Sauerstoff-Entkohlung

Status	$	#	Length	Hides	Source
Candidate	0,17	2	17		Plug&Play-Prinzip
Candidate	0,08	1	16		Plug&Play-System

Status	$	#	Length	Hides	Source
Candidate	0,58	6	21		leak-indicating·liquid
Candidate	0,97	10	21		multi-labelling·system

There might a list that is easy to drop.

Status	$	#	Length	Hides	Source
Candidate	0,48	5	19		directive·2014/32/EU
Candidate	0,29	3	19		EN·1998-1/NA:2011-01
Candidate	2,52	26	19		directive·2014/34/EU
Candidate	0,39	4	19		directive·2006/42/EG
Candidate	0,68	7	19		directive·[illegible]

Status	$	#	Length	Hides	
Candidate	0,24	7	6		+/-10%
Candidate	0,29	3	7		<10·mg/l
Candidate	0,53	3	10		=·1,000·m³/h
Candidate	0,39	4	4		=·d/2
Candidate	0,71	4	5		=·d/2·+
Candidate	0,29	3	6		≤·90m/s
Candidate	0,48	5	5		≤·f/fn
Candidate	0,89	5	6		≤·f/fn·<

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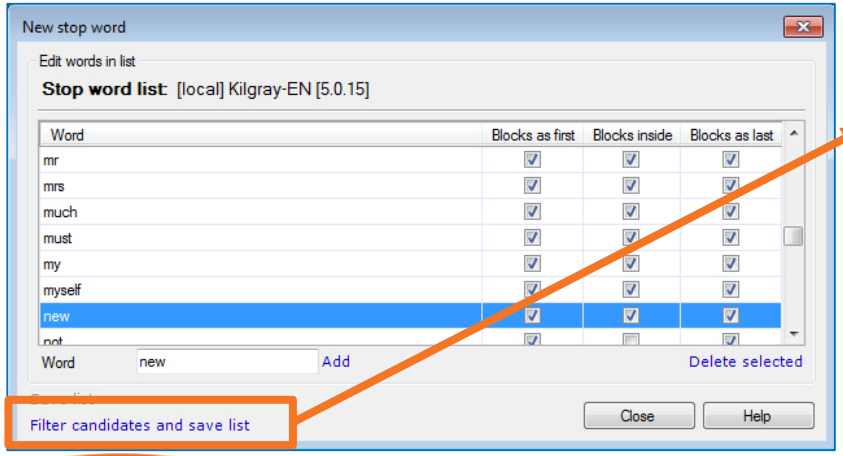
The Work in the Extraction List

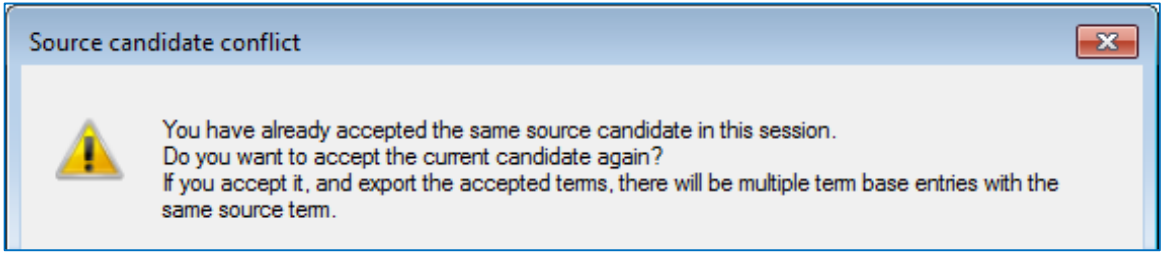
- Send terms to the stop word list…
- …and filter candidates for the stop word to drop them in one go.



Status	S	#	Length	Hides	Source
Candidate	107,92	3153	3		new
Candidate	0,39	4	4		new·E
Candidate	0,68	7	4		•·new
Candidate	3,46	101	4		News
Candidate	0,17	5	4		NEWA
Candidate	0,68	20	4		anew
Candidate	0,29	3	5		=>·new
Candidate	2,88	84	5		newly
Candidate	0,29	3	5		new·VM

The Details

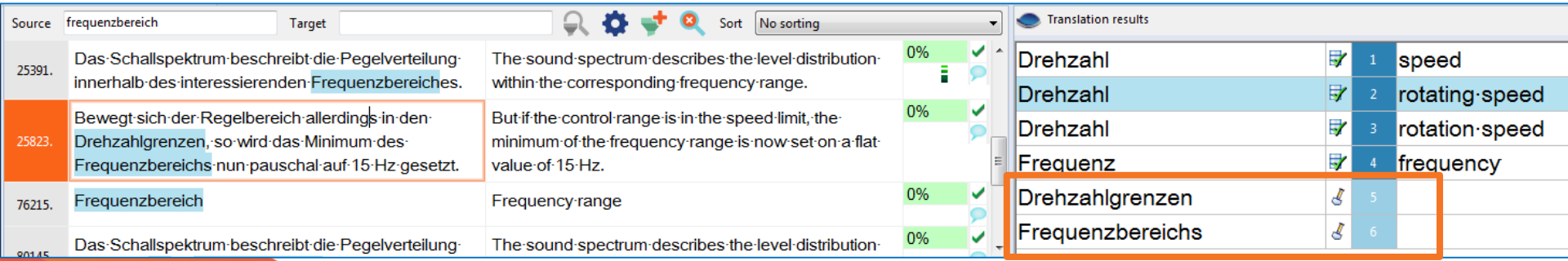
- If you try to accept an already accepted term, memoQ will notify you.



- The status bar shows how many candidates there are, how many have been accepted or dropped already

The Details

- Accepted (confirmed) term candidates appear in the translation results list with a spade symbol (term mining).
- They are used for matching like the alignments from the LiveDocs.



The Numbers

- From my own extractions (EN or DE)
- General language documents:
  - About 3-5% of all words (total word count) are possible terms
- Subject-matter specific documents:
  - About 5-7% of all words are possible terms

OR

- Between 10-20% of the term candidates in the extraction list are possible terms.

The Numbers

- Extraction speed
  - Going through a list of candidates in the extraction and just confirming and dropping source language terms: 2000-3000 candidates / hour
- Number of extracted terms (on average)
  - Source language only: 100+ terms/hour
  - Bilingual extraction: 80+ terms/hour
  - Bilingual with context, comments and other research in-between: 20-30+ terms/hour

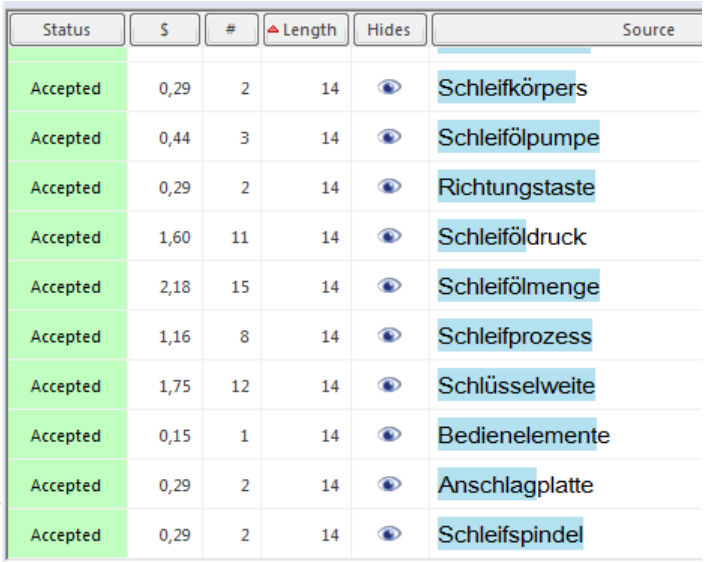
- Additional work
  - Sorting the list
  - Adding comments, instructions, questions…
  - Decide if all terms really are terms to keep

Wishes for the future

- Extraction from server term bases / sending a term extraction job to a translator/terminologist
- Regex to search/filter entries
- Possibility to create a list of endings that can help to select the base form out of singular, plural, genitive form… (language specific)
- Add the feature to mark a possible translation (in green, like the "guess translation" feature in the concordance search)
- Sort by one-word candidates and multi-word candidates
- When showing candidates with known terms only, it would be nice to know how many there are and also to have a list of only candidates that have no known term

Wishes for the future

- Search for terms that consist of capital letters only or have capital letter in the middle (acronyms, product names)
- Being able to sort for candidates that have a full match from the term base, those that have several matches from the term base and those where there are x characters (by length) added to the term base term



Status	$	#	Length	Hides	Source
Accepted	0,29	2	14		Schleifkörpers
Accepted	0,44	3	14		Schleifölpumpe
Accepted	0,29	2	14		Richtungstaste
Accepted	1,60	11	14		Schleiföldruck
Accepted	2,18	15	14		Schleifölmenge
Accepted	1,16	8	14		Schleifprozess
Accepted	1,75	12	14		Schlüsselweite
Accepted	0,15	1	14		Bedienelemente
Accepted	0,29	2	14		Anschlagplatte
Accepted	0,29	2	14		Schleifspindel

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