



## **MT-enhanced fuzzy matching with Transit NXT and STAR Moses**

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### **Description**

The STAR Group developed the translation memory system (TMS) Transit NXT and an SMT system based on Moses. It made sense to combine these two technologies in order to provide translators with assistance from both sources.

The first step was integration at a project-handling level: As with standard TMS, the text is first pretranslated using validated translations from the translation memory. The remaining “deltas” (new or changed segments) are sent to the MT engine for translation. This means that the translator is offered two types of suggestion for “deltas”: Fuzzy matches from the translation memory and machine translations from the MT engine. The translator checks the suggestions, selects the one which is most suitable and, if necessary, makes any linguistic amendments: A fuzzy match must, by definition, always be amended, though an MT translation may not need to be.

In practice, it quickly became apparent that the MT quality is especially high for those segments for which there is also a very good fuzzy match. The reason for this was obvious: MT engines are typically trained using a customer-specific translation memory and therefore provide results which are linguistically very similar to any human translations that are available. In this quality range, it is viewing, reading and comparing the suggestions that cost translators the most time: Once the best suggestion is selected, amendments are negligible.

Therefore, the second step was to make it easier for the translator to make their selection: Fuzzy match and MT suggestion were combined into a single, joint translation suggestion. This makes the number of suggestions clearer and simplifies both checking and decision-making.

The third step addressed the question of how a combined suggestion from fuzzy match and MT suggestion should be displayed. For “classic” fuzzy matches, the translator needs to be able to compare the “old” and “new” segments, which therefore requires the corresponding additional information. In conjunction with MT suggestions, this is superfluous: It simply needs to be clear to the translator which part of the segment comes from the translation memory and which part from the MT engine.

The result is a compact translation suggestion that combines the advantages of a fuzzy match from a validated translation memory with the efficiency of an MT engine. With this “MT-enhanced fuzzy matching”, the translator can focus on post-editing and minimise the time spent viewing, selecting and adapting translation suggestions from these two sources.