

## DeepMiner

DeepMiner is a revolution in translation technology that extracts much more information from terminology and translation memory databases than any other solutions and uses it to greater effect.

The principle of DeepMiner technology is to **sub-segment segments from the translation memories**, in order then to **assemble** from these **sub-segments and from the termbase new fuzzy matches**.

To provide the most suitable translation, the algorithm is **based on probabilities** calculated with the frequencies of co-occurrences of terms and portions in all the databases. It compares the sentences and infers the translation.

To sum up, Deep Miner is an improved **Assemble feature**, also called Advanced Leveraging, and the richer the databases are the more accurate the **fuzzy match repairs** provided by algorithm will be.

### Here is a simple example of how DeepMiner can improve the translation.

My databases contain:

Source	Target
<u>In the Translation Memory</u>	
I have a brown dog.	J'ai un chien brun.
I do not like the colour brown.	Je n'aime pas la couleur brun.
<u>In the Termbase</u>	
<b>black</b>	noir

Here is my translation grid without DeepMiner after pre-translation:

Source	Match	Target
I have a brown dog.	100%	J'ai un chien brun.
I have a black dog.	80%	J'ai un chien brun.

This is my translation grid with DeepMiner after pre-translation:

Source	Match	Target
I have a brown dog.	100%	J'ai un chien brun.
I have a black dog.	80%	J'ai un chien noir.

The 80% match is a fuzzy match repair using DeepMiner technology that improves the pre-translation.