

PROMT Machine Translation for Amadeus Fare Quote Notes Translator

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Abstract

This document provides an overview of the implementation of PROMT Cloud solution into the [Amadeus Translator](#) application in the Amadeus booking system for translating Fare Quote Notes (FQN) to optimize the process of airline tickets sale and improve the quality of service for travel agencies' clients. FQN contain the rules, regulations and conditions that apply to a specific fare. FQN are created automatically in English and have specific format and language features.

1 Challenge

The Amadeus booking system helps travel agencies to find and book tickets for domestic and international flights. Airline companies store the information about their vacant seats and terms and conditions of the flights in the Amadeus database. The travel agencies use this database for booking tickets and explaining terms and conditions of the flights to travelers. Since this information available in English only, the travel agency staff deals with important information in foreign language, which could lead to misunderstanding and wrong decisions. To address this challenge, Amadeus decided to provide travel agencies with custom machine translation. The MT solution should meet the following requirements: understandable translation conveying the meaning of FQN and taking into account terms and abbreviations; high performance and reliability; integration in the Amadeus system's interface.

2 Solution Overview

PROMT suggested its solution PROMT Cloud with a programming interface (API) ready to process a large number of translation requests. The provided solution consisted of two components: dedicated customized translation module and dedicated web service for easy integration of MT into the Amadeus booking system.

To achieve better translation quality the following algorithms and customization data were added to the translation system:

- Special algorithm of FQN preprocessing taking into account their format and structure (deletion of mid sentence line breaks was implemented);
- Additional dictionaries
~1,200 terms typical for FQN
~20,000 names of airline companies and airport codes;
- Translation memory with professional translations of 150 most frequent sentences (including titles).

3 Results

The implemented solution translates more than 6,000 translation requests per week. Each translation request consists of about 700 words, which generates more than 4,000,000 translated words per week. The new application provides customized machine translation of FQN from English into Russian. Due to the use of advanced technologies and customized settings, the professional terminology of travel industry is taken into account in the application. With its help travel agents are able to quickly and easily obtain necessary information and provide passengers with complete and up-to-date information on terms of travel and restrictions of the chosen fare.