

## **Logos Machine Translation System**

Logos Corporation has been involved in machine translation R&D for over 27 years. From an English-Vietnamese system produced in 1972 to the latest releases of our software we have striven to produce the best machine translation (MT) software available. Today the Logos system is one of the best commercial MT systems on the market.

Our architecture coupled with experience in the commercial sector has made us a leader in providing solutions in our users' translation work. Logos does not claim to replace human translators; rather, we seek to enhance the professional translator's work environment.

The Logos system is fundamentally different from other computer-based translation programs. In addition to the easily extensible dictionaries with their underlying semantic foundation, Logos offers mechanisms that permit meanings to be deduced using contextual clues. These permit problem cases, such as concepts with completely separate meanings or subtle variations, to be translated suitably.

Logos analyzes whole source sentences, considering morphology, meaning, and grammatical structure and function. The analysis determines the semantic relationships between words as well as the syntactic structure of the sentence. Parsing is only source language-specific; generation is target language-specific. Although the Logos system was originally developed on the basis of a transfer approach, this has evolved in time to the present in which clear interlingual features are inherent in the system.

Unlike other commercial systems the Logos system relies heavily on semantic analysis. Using our proprietary Semantico-Syntactic Abstraction Language (SAL) the parser is able to achieve better results than syntactic analysis alone would allow.

This comprehensive analysis permits the Logos system to construct a complete and idiomatically correct translation in the target language. All aspects of the sentence contribute to the result.

The Logos system is an outstanding example of applying computational linguistics in the commercial sector.

Our exhibit at the 5<sup>th</sup> Conference on Applied Natural Language Processing will offer live demonstrations of the Logos Translation Express™ system. This Internet-based system allows users to submitted formatted documents for translation to our server and retrieve translated documents without loss of formatting.

Logos Corporation  
200 Valley Road  
Suite 400  
Mt. Arlington, NJ 07856

Voice: 201-398-8710  
Fax: 201-398-6102  
Email: [info@logos-usa.com](mailto:info@logos-usa.com)  
URL: <http://www.logos-ca.com>