



State of the Art in Automated Language Translation

New in Version 4.1 (April 2006)

- New software based security
- Support for 64-bit platform
- New side-by-side display for web page translations
- Simplified quality settings
- New language pairs
- Increased translation speed
- Improved translation quality

User Features

- Web services or C++ API for easy integration with other applications
- User Dictionary: Add or Import the terms that are important to you
- Unicode internal: headache-free extension to new languages and alphabets

Feature: Rapid, automatic learning

Benefits:

- Ability to use the LW Customizer to create a customized translation system within your organization
- Allows timely and cost-effective customization to new subject areas and text types
- Rapid development and deployment of new language pairs

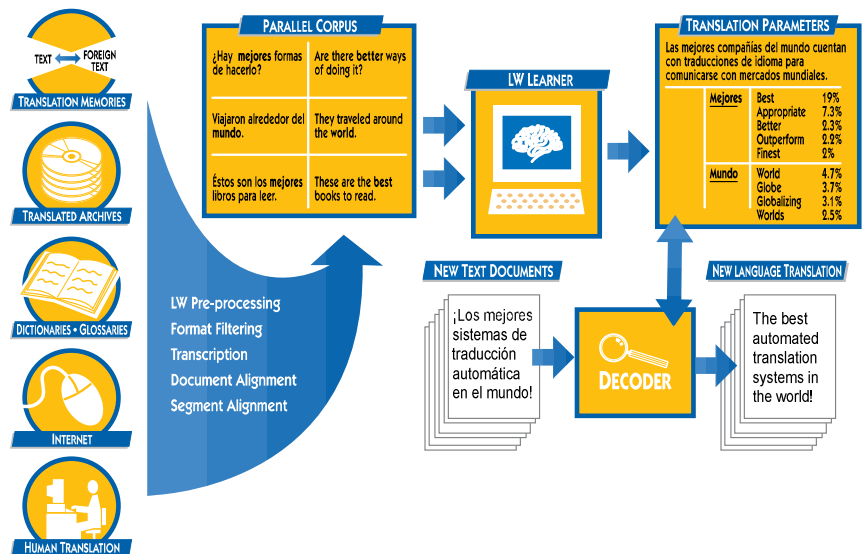
Language Weaver provides state-of-the-art, fully automated language translation software for government and commercial use. Our software products are continually infused with the latest advances in automated language translation research via our exclusive technology transfer agreement with the University of Southern California's Information Sciences Institute.

Language Weaver is one of the first companies to commercialize a statistical approach to machine translation. This breakthrough technique offers a decisive leap forward in translation quality. We believe that this advance will open up new areas of application for machine translation.

How it Works

Language Weaver uses statistical techniques from cryptography, utilizing learning algorithms that learn to translate automatically from existing translations. What they learn is up to date, appropriate and idiomatic, because it is learned directly from human translations. The software can be customized to any subject area or style. Unlike translation memory, Language Weaver does full translation of previously unseen text.

Translated material to train and customize a Language Weaver translation system may come in any number of formats, as shown on the left side of the illustration below. Translated material ranges from translation memory data and glossaries to translated archives and target language texts that are available on intranets, tapes, hard-drives, and websites. Once collected, parallel documents are identified and the source and target language text is aligned at the sentence level to create a **parallel corpus**. The Language Weaver **Learner** processes this corpus and extracts probabilistic translation dictionaries, patterns, and rules, which are called **translation parameters**. The translation parameters are used by a statistical translator, called the **Decoder**, to translate new texts for users. The translation software that a customer uses consists of a core translation system (decoder + translation parameters), user interfaces, and APIs.





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Feature: Language Weaver's target language model generates the most natural-sounding translations possible

Benefits:

- Natural, readable output
- High user acceptance
- Easy to use and revise

Feature: Exhaustively tested, robust commercial software

Benefits:

- Reliable performance
- Tolerant of errors in text
- Recognizes and rejects non-text input, or wrong language input
- Excellent memory management

Language Weaver translation software gives you access to information written in other languages. Our translation software allows you to read the real international news, in real time.

What We Offer

- Translation software for end user or OEM distribution
- Customization services for your domain
- Maintenance and technical support
- Expertise with major languages as well as less-commonly-taught languages, character sets, and encodings

Language Pairs

New language pairs are being added regularly.

- Arabic <> English
- Chinese <> English
- Persian <> English
- French <> English
- Italian <> English
- German <> English
- Spanish <> English
- French <> German
- Dutch <> English
- Portuguese <> English
- Swedish <> English
- Romanian <> English
- Russian <> English
- Somali > English
- Hindi > English

Language Weaver Works on Servers or Desktops

Language Weaver translation software is available for server deployments for teams of users. Our well-documented API enables embedding of Language Weaver translation systems into Web pages, content and globalization management systems, email or other document workflows. In addition, we offer an easy-to-use cut and paste interface, as well as file or web page translation options.

Standard Product Specifications

Client Server

OS: Windows 2003 Server, Windows 2000 Advance Server (SP3+)

2.8 GHz Intel Xeon processor *
4 GB RAM *

Interface: Language Weaver CGI and web browser OR customer generated application via Language Weaver C++ or Web services API

Performance: Varies with server load, network environment, hardware configuration,

Standalone

OS: Windows XP Professional

2.4 GHz Intel Pentium 4 processor *
2 GB RAM *

Interface: Language Weaver GUI OR customer generated application via Language Weaver API

Performance: Approximately 2,500 words per minute

**Note that memory and processor speed requirements will vary by language pair*

Language Weaver Overview

Language Weaver was incorporated in January, 2002 to commercialize a statistical approach to automatic translation. Language Weaver's proprietary statistical translation technology is the result of inventions and development at the University of Southern California's Information Sciences Institute (USC/ISI). Language Weaver is the recipient of several U.S. Government development contracts, NSF Phase I and II SBIR awards, and funding from In-Q-Tel.