

Fujitsu

Porting ATLAS to Unix workstations gave this venerable MT system a new lease on life.

Launched nearly ten years ago, Fujitsu's ATLAS is the oldest of the commercially available Japanese MT systems. The English-Japanese ATLAS I was introduced in 1984 and it was followed in 1985 by the Japanese-English ATLAS II system. In 1992, Fujitsu consolidated a number of advances with the introduction of the ATLAS S line; these run on Fujitsu's S family of Unix SPARC workstations and employ a combination of syntactic and semantic processing. The ATLAS S systems share an interlingual architecture, and Fujitsu has been working on other language pairs for ATLAS, including Japanese-Korean and Japanese-German, but these have not been commercially released yet.

While it is hard to pin down just how much ATLAS is used (there are a lot of "dormant" mainframe licenses), one Fujitsu customer who uses ATLAS extensively is the automobile manufacturer Matsuda (Mazda). According to Michael Beirne of Fujitsu Public Relations, Matsuda has been using ATLAS to translate a vast amount of automotive manufacturing document-ation from Japanese into English. Matsuda has a factory in Michigan which was built by a Fujitsu subsidiary that specializes in building highly automated factories. After building one such factory for Matsuda in Japan, this subsidiary was contracted to build an identical one in Michigan. While the design specifications for the original plant were all in Japanese naturally the subsidiary nonetheless needed to subcontract out the actual construction to local contractors in the US, as is customary. Matsuda hadn't anticipated this. Fortunately, another wing of Fujitsu could offer an MT system.

Matsuda started using ATLAS for parts lists and texts of technical drawings and soon turned to technical specifications. With a bit of lexicon building, the company quickly improved the accuracy rate from sixty to eighty percent. Emboldened by this success, Matsuda then turned to the full documentation but discovered that it faced an enormous challenge. The original documentation was sprinkled throughout the original factory and much of it was available only in hardcopy form. This highlights a common problem faced by early users of MT in Japan: the systems were not integrated properly within the document production system. Fujitsu's "smart" OCR systems were developed partly to help Matsuda prepare this document- ation for translation by ATLAS. Matsuda currently trans- lates approximately 1200 pages a month of automotive- related manufacturing documentation. The company estimates that MT reduces translation time from twenty-two minutes per page to half that.

ATLAS is also available through Nifty-Serve, the Japanese counterpart of CompuServe. Nifty-Serve's 550,000 users can send text to be translated by ATLAS, paying by the characters (¥1 per word E-J, ¥2 per word J-E). Additional post-editing services cost extra, depending on the service required ("rough" or "native- speaker" quality). Translating via Nifty-Serve has its limitations, most notably that users cannot build up or use special lexicons, and high-volume Nifty-Serve users are urged to license the software for on-site use. Nifty-Serve is operated by a joint venture partly owned by Fujitsu, which has the rights to exploit CompuServe "west of Hawaii."

Fujitsu makes abundantly explicit what kind of texts ATLAS is suitable for. No surprises here; ATLAS, like most MT systems, is best at technical manuals and to a lesser extent depending on the language pair content scanning of technical materials. What it *isn't* suitable for is correspondence, yet that is just what a lot of companies would like to use MT for. To answer this requirement, Fujitsu has developed a writing tool called ReadyPen which is designed to facilitate writing business letters in English. This Windows-based product includes a basic editor, an address database, 160 sample letters, a bilingual sample sentence database, and a basic Japanese-English dictionary. The package also includes Houghton-Mifflin's grammar checker, which ags at least some of the agree- ment and article errors Japanese

writers are prone to make while writing English.

Fujitsu Laboratories, 6-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100, Japan; Tel +81 3 3215 5236, Fax +81 3 3216 9365