

Carnegie
Mellon

Department of Computer Science

Special PS Seminar

YY: Towards a New Horizon of Process Collaboration over Networks

Masayuki Ida
MIT AI Lab
and
Aoyama Gakuin University CSRL

Thursday, November 11, 1993
3:30 p.m. - 5:00 p.m.
Wean Hall 4623

ABSTRACT

Masayuki Ida will discuss the concepts and the current status of his YY project. YY is a universal software system framework for collaboration of several processes scattered on a network. YY is designed to fit a wide area network environment where simple client/server computing scheme, like X-windows, cannot be fully functional. The name YY comes from 'Yet another Y', meaning a next of X. YY aims at the existence of huge centralized application servers and the divergence of user environment tools, and the needs for better user interface without the performance loss as possible even if the applications are at very distant locations or across national boundaries. Large database system or knowledge base system with frequent update falls into this category.

Using YY, a user can utilize his/her locally customized client/server operation environment, while remote application does not lose the control for user interaction. YY defines the socket based communication protocol between application process and user interface processes. The YY model essence is in the concept for intermittent synchronization between application oriented object space and user interfacing oriented object space, which enables the reduced network traffic.

YY onX, an implementation of YY on top of X, has been successfully used for several experimental applications; an experimental electronic library system, a simulated VCR browsing experiment for introduction of new information retrieval mechanism, an animation graphics design center experiment, a huge knowledge base access, and so on. These applications have been mostly written in CLOS, while user interfacing is written in C.

YY onX is to be demonstrated by real machines and video tape.

Masayuki Ida, an associate professor of CSRL of Aoyama Gakuin University, designed and developed the campus network system there and connected aoyama.ac.jp to the Internet in 1988, while he started the YY project in the same year. Since then he has been running the network and the YY research. YY got another place to carry out at Information Technology Promotion Agency in Japan, where a system with Windows 3.1J and a new experimental application are being developed. His early research includes the development of i8080 based Lisp machine with REDUCE-II in 1976.

His current research focus is on the integration of computer resources on heterogeneous network. He wrote several papers on his campus network system and his Lisp system in Japanese and some in English. He authored several books/articles on UNIX, Lisp, PC, and translated CLIL1/2, Lisp (3rd edition, by Patrick Winston), and others. He has been a principal member of ANSI X3J13 (Common Lisp) from the beginning and is the president of the Lisp Society of Japan, while he is a board member of Nihon Sun Users Group.

FurtherDetails: If you would like to meet with Masayuki Ida, please send your request for appointments to Barb Sandling at sandling@cs.cmu.edu or at x88860.