

PACKAGE ID - 000829SUN0000 CLERVER

KWIC TITLE - Interactive Collaborative Environments

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 06/01/1993 **PUBLICATION DATE** - 06/01/1993

DESCRIPTION - Time has been an invaluable commodity. In today's workplace of increased workload and shorter deadlines, solutions must be found to share electronic information quickly if not immediately. Teams would often have to schedule face-to-face meetings to share ideas which often proved to be expensive in both dollars and time if the participants were required to travel long distances. Software engineers at Sandia National Laboratories in Albuquerque, New Mexico, have developed a solution for this problem. The solution is a software product called ICE. The heart of ICE is the CLERVER which allows teams to collaborate via their own workstation with one another and view changes in real time. CLERVER's capabilities allow; immediate feedback, quicker decisions, first-hand involvement, broader participation, and interactive on-line problem solving. This sharing allows users to utilize only one copy of an application and share with up to 20 additional users. Each user in the session appears to be running the application locally, but in fact, the application only resides on one machine. When the session is over, any changes made and saved are recorded on the system where the valid application license resides.

PACKAGE CONTENTS - Media Directory; Software Abstract; Author's Notes;
Media Includes Source Code, Object Library, Executable Module,
Sample C-Shell Scripts to Execute Clerver, README.File;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

METHOD OF SOLUTION - CLERVER technology (written in C) provides the capability to share X-based applications with UNIX workstations,

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METHOD OF SOLUTION - (CONT) and Macintosh and PC systems. The system must have a network communications path, e.g. Ethernet, and an X-windows or X-server program. CLERVER X-sharing software relies on the X-11 client/server architecture. CLERVER works by inserting itself between the client (application) program and the real X-servers that are controlling the displays of the machine in a collaborative session. The CLERVER software acts as a multiplexor to send out X-protocol requests from the client to all of the X-servers. It also must be a translation engine to mitigate all of the differences between X-servers such as colors, fonts, key commands, etc.

COMPUTER - SUN

OPERATING SYSTEMS - UNIX, X-11 R5

PROGRAMMING LANGUAGES - The source code is written in C.

SOFTWARE LIMITATIONS - Maximum of 20 users in a session. X-client MUST follow all X-11 protocol standards.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - There are other packages in the marketplace that do what CLERVER does, but they are limited to homogenous platforms. CLERVER is uniquely capable of working in a multi-platform environment. Other distinguishable features of CLERVER are it's ability to interact with a mouse. CLERVER can also be coupled with third party off the shelf video conferencing software to allow full multi-media capabilities.

RELATED SOFTWARE - Any X-based application

OTHER PROG/OPER SYS INFO - CLERVER only shares applications running under X-windows or X-server.

HARDWARE REQS - The workstations must be networked together, i.e., Ethernet. The Sun workstation needed to run the CLERVER, but other workstations only need an X-server.

TIME REQUIREMENTS - No special time requirements.

REFERENCES - Informal documentation

ABSTRACT STATUS - Submitted 4/13/95. Released AS-IS 9/18/95

SUBJECT CLASS CODE - MO

KEYWORDS -
COMPUTER PROGRAM DOCUMENTATION
C CODES

E S T S C
ENERGY SCIENCE & TECHNOLOGY SOFTWARE CENTER
SOFTWARE ABSTRACT

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REAL TIME SYSTEMS
COMMUNICATIONS
PERSONAL COMPUTERS
COMPUTER NETWORKS

EDB SUBJECT CATEGORIES -
990200 990300

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS