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## CHATSERVER

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### REQUIREMENTS

CHATSERVER-NS Requires: CHATSERVER and COURIERSERVE.

CHATSERVER-RS232 requires: CHATSERVER and (DLTTY or DLRS232C). As of this date, CHATSERVER-RS232 hadn't been tested with Medley.

CHATSERVER-TCP requires: CHATSERVER and TCP. As of this date, CHATSERVER-TCP is unreliable: the chat server sometimes leaves open the connection and will not open another one.

In general, a protocol chatserver requires CHATSERVER and a protocol converter. Sources for TCP server available.

CHATSERVER also loads LispUsers modules CL-TTYEDIT and SIMPLECHAT.

The module PREEMPTIVE is useful in conjunction with CHATSERVER but not required.

### INTRODUCTION

CHATSERVER is a general facility that allows a Lisp workstation to be controlled from a dumb terminal. In addition to CHATSERVER, you will need a protocol driver: something that connects the CHATSERVER to a communication protocol. The various protocol drivers are the mechanism by which CHATSERVER can be controlled; versions include using XNS via CHATSERVER-NS, TCP/IP TELNET protocol via CHATSERVER-TCP, and RS232 via CHATSERVER-RS232. CHATSERVER-NS is the most reliable, although CHATSERVER-RS232 has worked reliably in the Lyric release.

The server implements password protection using the same mechanism as IDLE. There is another variable, CHATSERVER.PROFILE, which gets searched first for ALLOWED.LOGINS so that you can have a different setting.

IL:CHATSERVER.PROFILE [Variable]

The value of the variable CHATSERVER.PROFILE appended to the front of IDLE.PROFILE when determining login options etc for the chatserver. The property IDLE.ONLY is also consulted; if T, chatserver only allows connections when machine is in idle mode.

### Example:

```
(SETQ CHATSERVER.PROFILE ' (ALLOWED.LOGIN (T) IDLE.ONLY T))
```

means to allow only the previously logged in user, and then, only when in IDLE mode.

QUIT [Exec Command]

The QUIT exec command exits a chatserver session. It signals an error if you are not running in a chatserver session.

**Documentation for CHATSERVER-NS:**

CHATSERVER-NS implements the Xerox Network Systems GAPTELNET protocol. It allows connection to a machine running Medley from other machines that implement this protocol, including Viewpoint (using ViewpointChat), External Communication Service servers (which allow dial-in from remote terminals into an XNS network), XDE workstations and other Interlisp-D implementations (Koto, Lyric, Medley.)

Gaptelnet is a courier server program, and so requires the COURIERSERVE lispusers module (which it loads automatically). The following function is part of COURIERSERVE

(COURIER.START.SERVER) [Function]

This "starts" the courier server process which listens for connection attempts. It is necessary to call this (once) before you can CHAT to your Lisp workstation. (If the process dies for some reason, you will not be able to CHAT until you restart the process.)

**Documentation for CHATSERVER-TCP:**

This module was an attempt to implement a TCP/TELNET server. Unfortunately, the mechanism by which it waits for a connection is buggy, and it does not negotiate terminal characteristics properly with the client calling workstation. It is therefore unreliable & may need to be restarted. Using telnet from a Sun to Lisp I've found it was necessary to explicitly tell the Sun not to echo, to send character at a time, etc.

(TCPCHATSERVER) [Function]

It is necessary to call this function to spawn the process that waits for TCP connections.

**Documentation for CHATSERVER-RS232:**

The CHATSERVER-RS232 module attempts to allow for connections on the RS232 or TTY port on an 1186 or 1108. It uses DLRS232.

(RS232CHATSERVER) [Function]

Spawns a process waiting for a character to be typed on the RS232 port, and then starts a chatserver session.

**Other notes:**

The server runs a standard (XCL) exec. Note that you can't do graphics; the debugger will not attempt to open a window, only the type-in commands are available, ED will give you the "teletype" editor. Interrupt characters enabled are ^E, ^D, DEL, ^B, ^H and ^T. (Note that currently interrupts are only processed when they are read, and there is no way to interrupt a run-away process.)

Typeout uses a "---more---" style: after (PAGEHEIGHT) lines, the system will prompt you with a "---more---". Type any character, and the more will be erased.

Chatserver assumes you are chatting from a DM2500 emulator, and treats font changes as a switch between bold and regular as appropriate.

The PREEMPTIVE Lispusers module is useful when running chatserver, because it will keep the running process from blocking out the typein process. For some protocol drivers (and the NS server in particular), this is necessary to avoid timeouts.

CHATSERVER advises various facilities in the environment that normally create menus to check to see if the "controlling" keyboard is not the workstation console; these facilities include TTYIN, the editor, the debugger, CHAT. Thus, calls to the editor use the teletype-style editor from Interlisp, while FIX does not generally allow character editing.