# NAME

X - X window system server

# SYNOPSIS

X < display> [ option ... ] < tty>

### DESCRIPTION

X is the window system server. It is normally run automatically by init(8), which provides the tty argument. The display argument is the number of the bitmap display to service. The number is typically in the range 0-6, and defines the ports the server will accept connections on and the filename of the device.

The program *xinit*(8) is usually used to start X interactively.

Connections through the Unix domain, through TCP, and through DECnet are currently possible. The connections actually accepted by a server depend on how it was compiled. Unix domain connections are through  $/dev/X^*$ , where \* is the display number. TCP connections are through ports 5800+N (VAX byte order) and 5900+N (68000 byte order), where N is the display number. DECnet connections are through object name "X\*", where \* is the display number.

### **OPTIONS**

See the X(1) manual page for a list of command line options.

# INITIALIZATION

X(1) and your first *xterm*(1) are normally started by the *init*(8) program.

A typical line in /etc/ttys might be:

ttyv0 "/etc/xterm -L =-1+1 :0" xterm on secure window="/etc/Xvs100 0 -c -l"

However, if you want the xterm to run on a different machine, you might have:

remote "/etc/X 0 -l -c" xterm on secure

on the server machine and

ttyv0 "/exe/xterm -L =-1+1 orpheus:0" xterm on secure

on the client machine.

X maintains an access control list for accepting connections. The host where the server runs is initially on the list. In addition, hosts listed the file /etc/X\*.hosts, where \* is the display number, are also initially on the list. The format of this file is a list of host names, one per line. DECnet hosts are distinguished from Internet hosts by the existance of a trailing "::" in the name. The access control list can be manipulated with xhost(1).

X will catch the SIGHUP signal sent by init(8) after the initial process (usually the login xterm(1)) started on the display terminates. This signal causes all connections to be closed (thereby "disowning" the terminal), all resources to be freed, and all defaults restored.

The X protocol is documented in "X.doc". Note that while X is running, all access to the display must be through the window system.

### SEE ALSO

X(1), xinit(1), xterm(1), bitmap(1), xwm(1), xhost(1), xload(1), xset(1), qv(4), vs(4), init(8)

### DIAGNOSTICS

Are too numerous to list them all. If run from init(8), errors are logged in the file /usr/adm/X\*msgs, where \* is the display number. Otherwise, errors go to error output.

'fatal error: No such device or address at Opening' usually means someone else (like an existing X) has the display open.

'fatal error: No such file or directory at Initializing' usually means the VS100 firmware was not found or that the device file for the display does not exist.

# FILES

/etc/X*.hosts	Initial access control list
/usr/new/lib/X/font	VS100/QVSS font directory
/usr/new/lib/X/s-code	VS100 firmware directory
/dev/vs*	VS100 devices
/dev/qd*	QDSS devices
/dev/mouse	QVSS device
/dev/X*	Unix domain socket (if configured)
/usr/adm/X*msgs	Error log file

#### BUGS

The option syntax is inconsistent with itself and *xset(1)*.

If *X* dies before its clients, new clients won't be able to connect until all existing connections have their TCP TIME\_WAIT timers expire.

# AUTHOR

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