

## INIT(VIII)

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### NAME

*init* — process control initialization

### SYNOPSIS

*/etc/init*

### DESCRIPTION

Under MERT, a Carrier-Detect interrupt on a communication line (as specified in the *sgen* process) will create a UNIX supervisor process for the user logging in. UNIX will start with the *init* process, which is invoked with the line id.

First, *init* checks to see if the console switches contain 173030. (This number is likely to vary between systems.) If so, the console typewriter */dev/tty8* is opened for reading and writing and the Shell is invoked immediately. This feature is used to bring up a single-user system. When the system is brought up in this way, the *getty* and *login* routines mentioned below and described elsewhere are not used. If the Shell terminates, *init* starts over looking for the console switch setting.

Otherwise, *init* invokes a Shell, with input taken from the file */etc/rc*. This command file performs housekeeping like removing temporary files, mounting file systems, and starting daemons.

Then *init* reads the file */etc/tty8* and creates a process for the typewriter specified in the argument passed by the Unix supervisor process and opens the appropriate typewriter for reading and writing. These channels thus receive file descriptors 0 and 1, the standard input and output. *Getty* reads the user's name and invokes *login* (q.v.) to log in the user and execute the Shell.

Ultimately the Shell will terminate because of an end-of-file either typed explicitly or generated as a result of hanging up. The main path of *init*, which has been waiting for such an event, wakes up and removes the appropriate entry from the file *utmp*, which records current users, and makes an entry in */usr/adm/wtmp*, which maintains a history of logins and logouts.

### FILES

*/dev/tty?*, */etc/utmp*, */usr/adm/wtmp*, */etc/ttys*, */etc/rc*

### SEE ALSO

*login* (I), *kill* (I), *sh* (I), *ttys* (V), *getty* (VIII)