

Q: When Workspace exits, loginwindow sends a message like the following to syslog:

```
loginwindow: Workspace exited ts 0 cd 0 rc 0 sv 0 ss 0
```

What do the codes and numbers mean?

A: These numbers are from the **status** argument to a **wait()** system call.

ts	termsig	The signal which Workspace received causing it to exit.
cd	coredump	Whether or not Workspace produced a core dump (0: no, non-zero: yes).
rc	retcode	The exit code from Workspace (low-order eight bits).
sv	stopval	If this is WSTOPPED (see <sys/wait.h>), Workspace had stopped. (WSTOPPED is 0177 in Release 2.)
ss	stopsig	If stopval is WSTOPPED, this is the signal which stopped Workspace.

The most important of these for debugging is **termsig**: if it's non-zero, it tells you what signal caused Workspace to exit. These signals are listed in the ^asignal^o UNIX Manual Page, and in <sys/signal.h>.

Let's take an example. Assume you see the following message:

```
loginwindow: Workspace exited ts 4 cd 0 rc 0 sv 4 ss 0
```

The **ts 4** indicates that Workspace received a signal 4. Looking in **/usr/include/sys/signal.h**, you'll find the following:

```
#define      SIGILL 4      /* illegal instruction (not
```

In this case, Workspace terminated because of an illegal instruction. You might want to verify that the Workspace executable is intact and has not been corrupted.

Valid for 2.0, 3.0, 3.1