

NAME

devd - device state change daemon

SYNOPSIS

devd [-dnq] [-f *file*] [-l *num*]

DESCRIPTION

The **devd** daemon provides a way to have userland programs run when certain kernel events happen.

The following options are accepted.

- d** Run in the foreground instead of becoming a daemon and log additional information for debugging.
- f *file*** Use configuration file *file* instead of the default */etc/devd.conf*. If option **-f** is specified more than once, the last file specified is used.
- l *num*** Limit concurrent socket connections to *num*. The default connection limit is 10.
- n** Do not process all pending events before becoming a daemon. Instead, call daemon right away.
- q** Quiet mode. Only log messages at priority LOG_WARNING or above.

IMPLEMENTATION NOTES

The **devd** utility is a system daemon that runs in the background all the time. Whenever a device is added to or removed from the device tree, **devd** will execute actions specified in *devd.conf(5)*. For example, **devd** might execute *dhclient(8)* when an Ethernet adapter is added to the system, and kill the *dhclient(8)* instance when the same adapter is removed. Another example would be for **devd** to use a table to locate and load via *kldload(8)* the proper driver for an unrecognized device that is added to the system.

The **devd** utility hooks into the *devctl(4)* device driver. This device driver has hooks into the device configuration system. When nodes are added or deleted from the tree, this device will deliver information about the event to **devd**. Once **devd** has parsed the message, it will search its action list for that kind of event and perform the action with the highest matching value. For most mundane uses, the default handlers are adequate. However, for more advanced users, the power is present to tweak every aspect of what happens.

The **devd** utility reads */etc/devd.conf* or the alternate configuration file specified with a **-f** option and

uses that file to drive the rest of the process. While the format of this file is described in `devd.conf(5)`, some basics are covered here.

In the **options** section, one can define multiple directories to search for config files. The default config file specifies `/etc/devd` and `/usr/local/etc/devd` as directories to search. All files in these directories whose names match the pattern `*.conf` are parsed. These files are intended to be installed by third party vendors that wish to hook into the **devd** system without modifying the user's other config files.

Since `devctl(4)` allows only one active reader, **devd** multiplexes it, forwarding all events to any number of connected clients. Clients connect by opening the `SOCK_SEQPACKET` UNIX domain socket at `/var/run/devd.seqpacket.pipe`.

FILES

<code>/etc/devd.conf</code>	The default devd configuration file.
<code>/var/run/devd.seqpacket.pipe</code>	The socket used by devd to communicate with its clients.
<code>/var/run/devd.pipe</code>	A deprecated socket retained for use with old clients.

SEE ALSO

`devctl(4)`, `devd.conf(5)`

HISTORY

The **devd** utility first appeared in FreeBSD 5.0.

AUTHORS

M. Warner Losh