

NAME

ctld - CAM Target Layer / iSCSI target daemon

SYNOPSIS

ctld [-d] [-f *config-file*] [-u]

ctld -t [-f *config-file*] [-u]

DESCRIPTION

The **ctld** daemon is responsible for managing the CAM Target Layer configuration, accepting incoming iSCSI connections, performing authentication and passing connections to the kernel part of the native iSCSI target.

Upon startup, the **ctld** daemon parses the configuration file. If it encounters any errors, **ctld** exits. It then compares the configuration with the kernel list of LUNs managed by previously running **ctld** instances, removes LUNs no longer existing in the configuration file, and creates new LUNs as necessary. After that it listens for the incoming iSCSI connections, performs authentication, and, if successful, passes the connections to the kernel part of CTL iSCSI target, `cfiscsi(4)`, which handles it from that point.

When it receives a SIGHUP signal, the **ctld** reloads its configuration and applies the changes to the kernel. Changes are applied in a way that avoids unnecessary disruptions; for example removing one LUN does not affect other LUNs.

When exiting gracefully, the **ctld** daemon removes LUNs it managed and forcibly disconnects all the clients. Otherwise - for example, when killed with SIGKILL - LUNs stay configured and clients remain connected.

To perform administrative actions that apply to already connected sessions, such as forcing termination, use `ctladm(8)`.

The following options are available:

-f *config-file*

Specifies the name of the configuration file. The default is `/etc/ctl.conf`.

-d

Debug mode. The daemon sends verbose debug output to standard error, and does not put itself in the background. The daemon will also not fork and will exit after processing one connection. This option is only intended for debugging the target.

-t

Test the configuration file for validity and exit.

-u Use UCL configuration file format instead of the traditional non-UCL format.

FILES

/etc/ctl.conf The configuration file for **ctld**. The file format and configuration options are described in *ctl.conf(5)*.

/var/run/ctld.pid The default location of the **ctld** PID file.

EXIT STATUS

The **ctld** utility exits 0 on success, and >0 if an error occurs.

SEE ALSO

cfiscsi(4), *ctl(4)*, *ctl.conf(5)*, *ctladm(8)*, *ctlstat(8)*

HISTORY

The **ctld** command appeared in FreeBSD 10.0.

AUTHORS

The **ctld** was developed by Edward Tomasz Napierala <trasz@FreeBSD.org> under sponsorship from the FreeBSD Foundation.