

NAME

finalrd – final runtime directory generator for shutdown

SYNOPSIS

```
systemctl enable --now finalrd.service
```

HOOKS DIRECTORIES

```
/usr/share/finalrd/*.finalrd
/etc/finalrd/*.finalrd
/run/finalrd/*.finalrd
```

HOOKS INTERFACE

```
foo.finalrd setup
foo.finalrd halt|poweroff|reboot|kexec
```

DESCRIPTION

finalrd generates a shutdown directory */run/initramfs* which **systemd-shutdown** pivots to during shutdown. There system shutdown can be finalised and arbitrary hooks can be executed off-root, to safely cleanup rootfs and perform any other shutdown tasks.

For example, a hook may takeover monitoring external metadata RAID arrays, wait for them to be clean, and stop them. If one is using iscsiroot, it maybe needed to perform iscsi logout on shutdown.

Typically, one would not run **finalrd** directly, but instead activate **finalrd.service**. This would execute **finalrd** generator late in the shutdown cycle, just in time for pivot.

HOOKLESS OPERATION

If *initramfs-tools* is not available, and thus *copy_exec* is not available, hooks will not be executed or copied into the shutdown directory. However, shutdown dir will still be created to ensure init has somewhere to pivot, and attempt a cleaner shutdown without holding up the root filesystem.

For example, Ubuntu Core is such system.

HOOKS INTERFACE DESCRIPTION

**finalrd* hooks can be shipped in */usr*, */etc*, */run*. These directories are for distribution, sysadmin, and transient hooks respectively.

They are multi-purpose binaries with action passed as the first argument.

During setup stage, hooks are executed from the rootfs with one argument **setup** passed as the first arg. All hooks are executed in all the directories in order, first everything in */usr*, then from */etc*, then from */run*. Environmental variables *DESTDIR* and *DESTROOTDIR* are set pointing at the finalrd location. This is done for convenience to use *initramfs-tools*'s *copy_exec* function or dracut-install, for copying binaries.

During shutdown stage, hooks are executed from finalrd in parallel with one argument passed to them. The argument is one of **halt**, **poweroff**, **reboot**, **kexec**.

Note if there are identically named hooks in multiple configuration directories, all of them will be executed during setup stage. But only the last one will be copied into the finalrd and executed during the shutdown stage.

SEE ALSO

The *initrd* Interface of *systemd* <<https://www.freedesktop.org/wiki/Software/systemd/InitrdInterface>>