How OpenRC Works

/etc/inittab

Init needs a configuration file that specifies what actions need to be taken. This configuration file is /etc/inittab

sysinit

init's first action is to mount all file systems. This is defined in the following line from /etc/inittab. `si::sy sin it: /sb in/ - openrc sysinit`

bootwait

init's second action is to execute all scripts that had symbolic links in /etc/runlevels/-boot/. This is defined in the following line from /etc/inittab. `rc::bo otw ait :/s b in /openrc boot`

initdefault

init checks its configuration file to see what runlevel it should run. To decide this, it reads the following line from /etc/inittab. `id :3:i nit def ault:`

runlevel

In this casethe runlevel id is 3. Using this information, init checks what it must run to start runlevel 3. `l3:3:w ait :/s bin / openrc default`. The line that defines level 3, again, uses the openrc script to start the services (now with argument default)

How OpenRC Works (cont)

consoles

init decides what virtual consoles it should activate and what commands need to be run at each console.
c1:12345:respawn:/sbin/agetty 38400 tty1 linux
c2:12345:respawn:/sbin/agetty 38400 tty2 linux
c3:12345:respawn:/sbin/agetty 38400 tty3 linux
c4:12345:respawn:/sbin/agetty 38400 tty4 linux
c5:12345:respawn:/sbin/agetty 38400 tty5 linux
c6:12345:respawn:/sbin/agetty 38400 tty6 linux

Configuration

/etc/rc.conf

Runlevels

sysinit

shutdown

reboot

boot

default

nonetwork

single

Initscripts

Working with initscripts

The scripts that the openrc process starts are called init scripts. Each script in /etc/init.d/ can be executed with the arguments start, stop, restart, zap, status, ineed, iuse, iwant, needsme, usesme, or wantsme.

Start a service

/etc/init.d/postfix start

Stop a service, but not the services that depend on it

/etc/init.d/postfix --nodeps stop

See what status a service has

/etc/init.d/postfix status

Ask what dependencies the service has

/etc/init.d/postfix ineed

Ask what services require the service

/etc/init.d/postfix needsme

Configuring services

/etc/conf.d

Every init script that can be configured has a file in /etc/conf.d/. For instance, the apache2 initscript (called /etc/init.d/-apache2) has a configuration file called /etc/conf.d/apache2, which can contain the options to give to the Apache 2 server when it is started. Such a configuration file contains only variables.

Replacing default runlevel

Replace runlevel

Add a new entry in the bootloader configuration for the desired runlevel. In that entry, add `softle vel =de sired` as a boot parameter.

Working with runlevel

Change to nonetwork runlevel	rc nonetwork
Change to default runlevel	rc default
Change to shutdown runlevel	rc shutdown
Change to reboot runlevel	rc reboot
Show status info about runlevels	rc-status [runlevel]
Locate and run an OpenRC service	rc-service service cmd [...]
Adding services	rc-update add postfix default
Removing services	rc-update del postfix default
Showing services	rc-update show