

A guide to using systemd

This is how to stop a running service temporarily:

```
systemctl stop servicename.service
```

Send a kill:

```
systemctl kill sshd.service
```

```
systemctl kill -s HUP sshd.service
```

This stops it from starting at boot, but does not stop a running service:

```
systemctl disable servicename.service
```

And there is one way to really really stop a service for good, short of uninstalling it, and that is masking it by linking it to `/dev/null`:

```
ln -s /dev/null /etc/systemd/system/servicename.service
```

```
systemctl daemon-reload
```

When you do this you can't even start the service manually. Nothing can touch it.

What if you change your mind? Pish tosh, it's easy. Simply delete the symlink and run

```
systemctl enable servicename.service.
```

While we're here, let's talk about two reload commands: `daemon-reload` and `reload`. The `daemon-reload` option reloads the entire systemd manager configuration without disrupting active services. `reload` reloads the configuration files for specific services without disrupting service, like this:

```
systemctl reload servicename.service
```

This reloads the actual configuration file used by the hardy sysadmin, for example the `/etc/ssh/sshd_config` file for an SSH server, and not its systemd unit file, `sshd.service`. So this is what to use when you make configuration changes.

List active service units:

```
systemctl --type=service
```

list all service units:

```
systemctl --type=service --all
```

list systemd services:

```
systemctl list-unit-files
```

default target

The system boots to **default.target**

This is a symbolic link to **multiuser.target** or **graphical.target**.

Changing the default runlevel/target is replacing the symbolic link

```
ln -sf /lib/systemd/system/multi-user.target /etc/systemd/system/default.target
```

To change runlevel:

```
systemctl isolate multi-user.target
```

booting

At boot time, on the kernel grub line, add:

```
systemd.unit=xxxxx
```

So what's taking so long? We can find out with the systemd-analyze blame command

```
$ systemd-analyze blame
60057ms sendmail.service
51241ms firstboot-graphical.service
3574ms sshd-keygen.service
3439ms NetworkManager.service
3101ms udev-settle.service
3025ms netfs.service
2411ms iptables.service
2411ms ip6tables.service
2173ms abrt.service
2149ms nfs-idmap.service
2116ms systemd-logind.service
2097ms avahi-daemon.service
1337ms iscsi.service
```

If you like pretty graphs systemd includes a cool command for automatically generating an SVG image from the blame output, like this:

```
systemd-analyze plot > graph1.svg
```

To shutdown:

```
systemctl poweroff
```

systemctl files

```
/lib/systemd/system/
```

```
/etc/systemd/system/ is for customized settings
```

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