



Services & Settings

Basic Services

e.g. http, ftp, etc.

Common Flow of Running a Service

1. Installation

- Through ports, packages, or source tarballs

2. Configuration

- Service specific config file(s)
- rc.conf

3. Start

- rc.d/*

4. Maintenance

- Updating

```
sshd_enable="YES"  
inetd_enable="YES"  
sendmail_enable="YES"  
nfs_client_enable="YES"  
nfs_client_flags="-n 4"  
amd_enable="YES"
```

/etc/rc.conf

Configuration Files (1/3)

- ❑ Local installed programs' configuration files are located under /usr/local/etc
 - Daemon → *program-name.conf*
 - pure-ftpd.conf
 - user-program → *program-name***rc**
 - wgetrc
 - screenrc

- ❑ Default config file usually installed with .sample or .default suffix
 - pure-ftpd.conf.sampleor different suffix for different purpose
 - php.ini-dist
 - php.ini-recommendedcopy before use it

Configuration Files (2/3)

- ❑ A program with multiple config files are usually located in */usr/local/etc/program-name/*
 - apache*
 - postfix

- ❑ Most config files have clear comment at the beginning or before each description

- ❑ Most popular styles

- *key <space>value*
- *key = value*

Read documents to know each option's meaning

```
pure-ftpd.conf:
# IP address/port to listen to (default=all IP
and port 21)
# Bind                                127.0.0.1,21
# Fork in background
Daemonize                              yes
```

Configuration Files (3/3)

❑ Some with local effectiveness

- Markup language-like

```
<directory /path>  
setting-for-this-path...  
</direction>
```

- Samba 、 rsync

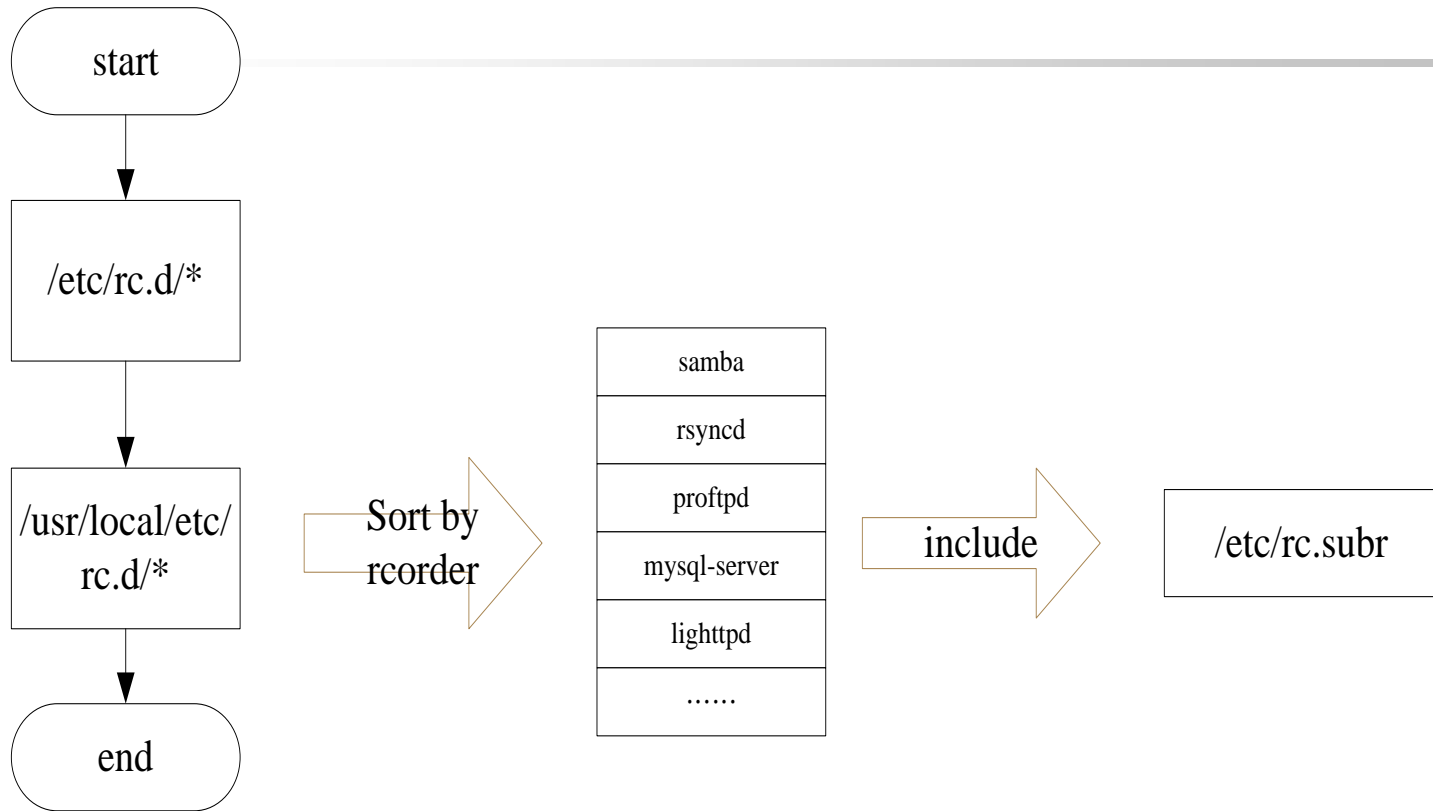
```
[xxxx]  
settings...
```

```
[yyyy]  
settings....
```

RC Script

Scripts for starting/stopping a service

RC Script



- ❑ Dependency between each service is described in header of the script
- ❑ rorder is used to find out dependency ordering of each script
- ❑ Each rc script define what to do when start/stop ...
- ❑ /etc/rc.subr defines what to do & check before/after start stop

How to use rc script(1/2)

❑ Example ntpd

```
> /etc/rc.d/ntpd
Usage: /etc/rc.d/ntpd [fast|forcelone](start|stop|restart|rcvar|status|poll)
```

❑ After booting... (rc.conf)

- Pidfile: Record (master) process id of the service

```
> less /var/run/ntpd.pid
2087
> ps aux|grep ntpd
root      2087    0.0  0.1 11296  2624  ??  Ss
```

❑ Start / Stop / Restart (Start after stop)

```
# ftpd
#
ftpd_enable="NO"
# (default: "")
```

❑ rcvar

- Display which rc.conf variable are used to control the startup of service
- Ex: ntpd_enable="YES"

How to use rc script(2/2)

❑ Status

- Check the service is running or not

❑ Reload

- Reload configuration file if the service support

❑ [One | fast | force]

- One
 - set rcvar = yes
 - Start the service even if XXXX_enable=NO
- Force
 - Set rcvar= yes and set rc_force=yes
- Fast
 - Skip pid check

Local installed service

- ❑ Use *path-to-rcscript* rcvar command to know which variable should set to “YES” to enable this service
- ❑ For further information, read comments from that script
 - /usr/local/etc/rc.d/pure-ftpd

```
# Add the following lines to /etc/rc.conf to enable pure-ftpd:
#
# pureftpd_enable="YES"
#
# For launch uploadscript daemon define
# pureftpd_upload_enable="YES"
# pureftpd_uploadscript="/full/path/to/launch_script"
```