

Linux 基础入门之实验九 Linux 任务计划 crontab

1.crontab 的简介

crontab 命令常见于 Unix 和类 Unix 的操作系统之中 (Linux 就属于类 Unix 操作系统)，用于设置周期性被执行的指令。

crontab 命令从输入设备读取指令，并将其存放于 **crontab** 文件中，以供之后读取和执行。通常，**crontab** 储存的指令被守护进程激活，**crond** 为其守护进程，**crond** 常常在后台运行，每一分钟会检查一次是否有预定的作业需要执行。

通过 **crontab** 命令，我们可以在固定的间隔时间执行指定的系统指令或 shell script 脚本。时间间隔的单位可以是分钟、小时、日、月、周的任意组合。

2.crontab 准备

启动 rsyslog 和 crontab。

```
shiyanolou:~ / $ sudo service rsyslog start [1:41:56]
* Starting enhanced syslogd rsyslogd [ OK ]
shiyanolou:~ / $ sudo cron -f & [1:42:20]
[1] 1269
shiyanolou:~ / $ [1:42:38]
```

3.crontab 使用

添加任务计划

```
shiyanolou:~ / $ crontab -e [1:57:45]
no crontab for shiyanolou - using an empty one

Select an editor. To change later, run 'select-editor'.
 1. /usr/bin/code
 2. /usr/bin/vim.basic
 3. /usr/bin/vim.gtk

Choose 1-3 [2]: 2
crontab: installing new crontab
shiyanolou:~ / $ crontab -l [2:09:05]
# Edit this file to introduce tasks to be run by cron.
#
# Each task to run has to be defined through a single line
# indicating with different fields when the task will be run
# and what command to run for the task
#
# To define the time you can provide concrete values for
# minute (m), hour (h), day of month (dom), month (mon),
# and day of week (dow) or use '*' in these fields (for 'any').#
# Notice that tasks will be started based on the cron's system
# daemon's notion of time and timezones.
#
# Output of the crontab jobs (including errors) is sent through
# email to the user the crontab file belongs to (unless redirected).
#
# For example, you can run a backup of all your user accounts
# at 5 a.m every week with:
# 0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
# For more information see the manual pages of crontab(5) and cron(8)
#
# m h dom mon dow   command
*/1 * * * * touch /home/shiyanolou/$(date +%Y\%m\%d\%H\%M\%S)
shiyanolou:~ / $ [2:10:24]
```

验证 cron 是否在后台启动

```
shiyanolou:~ / $ ps aux | grep cron [2:11:54]
root      1276  0.0  0.0  53904  3952 pts/0    SN   01:57   0:00 sudo cron -f
root      1279  0.0  0.0  30148  3016 pts/0    SN   01:57   0:00 cron -f
shiyanolou 1387  0.0  0.0  15384   940 pts/0    S+   02:12   0:00 grep --color=au
to --exclude-dir=.bzip --exclude-dir=CVS --exclude-dir=.git --exclude-dir=.hg --e
xclude-dir=.svn cron
shiyanolou:~ / $ pgrep cron [2:12:08]
1279
shiyanolou:~ / $ [2:12:37]
```

任务创建后的文件生成情况

```
shiyancelou:~/ $ ll [2:12:37]
总用量 8.0K
-rw-rw-r-- 1 shiyancelou shiyancelou 0 6月 1 02:10 20190601021001
-rw-rw-r-- 1 shiyancelou shiyancelou 0 6月 1 02:11 20190601021101
-rw-rw-r-- 1 shiyancelou shiyancelou 0 6月 1 02:12 20190601021201
-rw-rw-r-- 1 shiyancelou shiyancelou 0 6月 1 02:13 20190601021301
lrwxrwxrwx 1 shiyancelou shiyancelou 10 6月 9 2018 anaconda3 -> /anaconda3
drwxrwxr-x 2 shiyancelou shiyancelou 4.0K 6月 9 2018 Code
drwxr-xr-x 2 shiyancelou shiyancelou 4.0K 6月 9 2018 Desktop
```