EC2X&AG35-QuecOpen Auto-Startup Service Guidelines

LTE Module Series

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About the Document

History

Revision	Date	Author	Description
1.0	2018-02-27	Jackson	Initial
1.1	2018-04-08	Francis HUAN	Amendment

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1 Startup Sequence for Linux Application

After the kernel starting the init process, the init process will parse the file /etc/inittab. The init program used is sysvinit, and the startup scripts in the /etc/rcS.d/ directory will be executed in sequence after rc script starting.

In principle, a startup program could be added in any script of init, rcS, rc, as Linux provides a boot startup program method, it's recommended to take the method mentioned in the later chapters.

2 Adding Linux Auto-Startup Program

Create a soft link in the /etc/rc[0-6].d/ directory which points to the control script in the /etc/init.d/ directory, in which, the naming rule of the files under directory /etc/rc[0-6].d is S|K + nn + script.

- 0-6 is the running level of Linux operating system, and check the current running level by executing runlevel, taking rc5 is available enough.
- S|K, the program named with the beginning of S is the script to be executed when power on, the program named with the beginning of K is the script to be executed when power off.
- nn, whose range is 0-100, indicates priority, the higher the number, the lower the priority.
- script, is the file name of the script which soft link points to.

Adding Methods on Linux Console

3 Method One

If /etc is not the tmpfs and is readable/writable, create soft link by command ln according to naming rule.

3.1.

1. In /etc/init.d/, add the program to be executed when power on. Take test.sh as an example.

```
root@mdm9607-perf:/etc/init.d# ls -l test.sh
-rwxrwxrwx    1 root     root            18 Jan  6 17:58 test.sh
```

2. Create the soft link of test.sh under rc5 directly. test.sh is the startup script, and the priority weight is 45.

```
root@mdm9607-perf:/etc/init.d# ln -sv test.sh ../rc5.d/S45test.sh
```

3.2. Method Two

If /etc is not a tmpfs and is readable/writable, create auto-startup program by command update-rc.d.

1. In /etc/init.d/, add program to be executed when power on. Take test.sh as an example.

```
root@mdm9607-perf:/etc/init.d# ls -l test.sh
-rwxrwxrwx    1 root     root            18 Jan  6 17:58 test.sh
```

3.3.

2. Create the soft link by command update-rc.d directly, such as update-rc.d test.sh defaults 45.

Method Three

If /etc is the tmpfs, add the program to be executed when power on to /data/boot/, and name it according to the naming rule, then this program will be copied from /data/boot to /etc/, avoiding the files in /etc being lost after rebooting. (SDK upgrade is required.)

4 Adding Methods by SDK Packaging

Copy the program to be executed when power on to the directory /ql-ol-rootfs/etc/init.d/. Enter the directory ql-ol-rootfs/etc/rc5.d, and execute `ln -vsf ../init.d/test.sh S45test.sh` to create the soft link, then make rootfs. The priority weight is 45.