升级系统内核相关命令

rpm --import https://www.elrepo.org/RPM-GPG-KEY-elrepo.org

rpm -Uvh http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm

yum --disablerepo=\\* --enablerepo=elrepo-kernel repolist

yum --disablerepo=\\* --enablerepo=elrepo-kernel list kernel\*

yum --disablerepo=\\* --enablerepo=elrepo-kernel install -y kernel-lt

删除旧版本工具包

yum remove kernel-tools-libs kernel-tools

安装新版本工具包

yum --disablerepo=\\* --enablerepo=elrepo-kernel install -y kernel-lt-tools

设置开机默认使用新版本内核

grep '^menuentry' /boot/grub2/grub.cfg | awk -F"'" '{print $2}'

grub2-set-default "CentOS Linux (4.4.236-1.el7.elrepo.x86\_64) 7 (Core)"

grub2-editenv list

注意：CentOS Linux (4.4.236-1.el7.elrepo.x86\_64) 7 (Core)是我安装的内核版本，各自系统安装的内核版本可能不一样，不要盲目复制。

以下为实践过程

[root@k8s-node-01 ~]# cat /etc/redhat-release

CentOS Linux release 7.8.2003 (Core)

[root@k8s-node-01 ~]# uname -r

3.10.0-1127.el7.x86\_64

[root@k8s-node-01 ~]# rpm --import https://www.elrepo.org/RPM-GPG-KEY-elrepo.org

[root@k8s-node-01 ~]# rpm -Uvh http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm

Retrieving http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm

Preparing... ################################# [100%]

Updating / installing...

1:elrepo-release-7.0-3.el7.elrepo ################################# [100%]

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# yum --disablerepo=\\* --enablerepo=elrepo-kernel repolist

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* elrepo-kernel: mirror.rackspace.com

elrepo-kernel | 2.9 kB 00:00:00

elrepo-kernel/primary\_db | 1.9 MB 00:00:06

repo id repo name status

elrepo-kernel ELRepo.org Community Enterprise Linux Kernel Repository - el7 37

repolist: 37

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# yum --disablerepo=\\* --enablerepo=elrepo-kernel list kernel\*

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* elrepo-kernel: hkg.mirror.rackspace.com

Installed Packages

kernel.x86\_64 3.10.0-1127.el7 @anaconda

kernel-tools.x86\_64 3.10.0-1127.el7 @anaconda

kernel-tools-libs.x86\_64 3.10.0-1127.el7 @anaconda

Available Packages

kernel-lt.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-devel.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-doc.noarch 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-headers.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-tools.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-tools-libs.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-lt-tools-libs-devel.x86\_64 4.4.236-1.el7.elrepo elrepo-kernel

kernel-ml.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-devel.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-doc.noarch 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-headers.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-tools.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-tools-libs.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

kernel-ml-tools-libs-devel.x86\_64 5.8.9-1.el7.elrepo elrepo-kernel

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# yum --disablerepo=\\* --enablerepo=elrepo-kernel install -y kernel-lt

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* elrepo-kernel: hkg.mirror.rackspace.com

Resolving Dependencies

--> Running transaction check

---> Package kernel-lt.x86\_64 0:4.4.236-1.el7.elrepo will be installed

--> Finished Dependency Resolution

Dependencies Resolved

=========================================================================================================================

Package Arch Version Repository Size

=========================================================================================================================

Installing:

kernel-lt x86\_64 4.4.236-1.el7.elrepo elrepo-kernel 40 M

Transaction Summary

=========================================================================================================================

Install 1 Package

Total download size: 40 M

Installed size: 182 M

Downloading packages:

kernel-lt-4.4.236-1.el7.elrepo.x86\_64.rpm | 40 MB 00:00:13

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Warning: RPMDB altered outside of yum.

Installing : kernel-lt-4.4.236-1.el7.elrepo.x86\_64 1/1

Verifying : kernel-lt-4.4.236-1.el7.elrepo.x86\_64 1/1

Installed:

kernel-lt.x86\_64 0:4.4.236-1.el7.elrepo

Complete!

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# yum remove kernel-tools-libs kernel-tools

Loaded plugins: fastestmirror

Resolving Dependencies

--> Running transaction check

---> Package kernel-tools.x86\_64 0:3.10.0-1127.el7 will be erased

---> Package kernel-tools-libs.x86\_64 0:3.10.0-1127.el7 will be erased

--> Finished Dependency Resolution

Dependencies Resolved

=========================================================================================================================

Package Arch Version Repository Size

=========================================================================================================================

Removing:

kernel-tools x86\_64 3.10.0-1127.el7 @anaconda 292 k

kernel-tools-libs x86\_64 3.10.0-1127.el7 @anaconda 18 k

Transaction Summary

=========================================================================================================================

Remove 2 Packages

Installed size: 310 k

Is this ok [y/N]: y

Downloading packages:

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Erasing : kernel-tools-3.10.0-1127.el7.x86\_64 1/2

Erasing : kernel-tools-libs-3.10.0-1127.el7.x86\_64 2/2

Verifying : kernel-tools-libs-3.10.0-1127.el7.x86\_64 1/2

Verifying : kernel-tools-3.10.0-1127.el7.x86\_64 2/2

Removed:

kernel-tools.x86\_64 0:3.10.0-1127.el7 kernel-tools-libs.x86\_64 0:3.10.0-1127.el7

Complete!

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# yum --disablerepo=\\* --enablerepo=elrepo-kernel install -y kernel-lt-tools

Loaded plugins: fastestmirror

Loading mirror speeds from cached hostfile

\* elrepo-kernel: hkg.mirror.rackspace.com

Resolving Dependencies

--> Running transaction check

---> Package kernel-lt-tools.x86\_64 0:4.4.236-1.el7.elrepo will be installed

--> Processing Dependency: kernel-lt-tools-libs = 4.4.236-1.el7.elrepo for package: kernel-lt-tools-4.4.236-1.el7.elrepo.x86\_64

--> Processing Dependency: libcpupower.so.0()(64bit) for package: kernel-lt-tools-4.4.236-1.el7.elrepo.x86\_64

--> Running transaction check

---> Package kernel-lt-tools-libs.x86\_64 0:4.4.236-1.el7.elrepo will be installed

--> Finished Dependency Resolution

Dependencies Resolved

=========================================================================================================================

Package Arch Version Repository Size

=========================================================================================================================

Installing:

kernel-lt-tools x86\_64 4.4.236-1.el7.elrepo elrepo-kernel 155 k

Installing for dependencies:

kernel-lt-tools-libs x86\_64 4.4.236-1.el7.elrepo elrepo-kernel 77 k

Transaction Summary

=========================================================================================================================

Install 1 Package (+1 Dependent package)

Total download size: 232 k

Installed size: 366 k

Downloading packages:

(1/2): kernel-lt-tools-4.4.236-1.el7.elrepo.x86\_64.rpm | 155 kB 00:00:00

(2/2): kernel-lt-tools-libs-4.4.236-1.el7.elrepo.x86\_64.rpm | 77 kB 00:00:00

-------------------------------------------------------------------------------------------------------------------------

Total 328 kB/s | 232 kB 00:00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : kernel-lt-tools-libs-4.4.236-1.el7.elrepo.x86\_64 1/2

Installing : kernel-lt-tools-4.4.236-1.el7.elrepo.x86\_64 2/2

Verifying : kernel-lt-tools-4.4.236-1.el7.elrepo.x86\_64 1/2

Verifying : kernel-lt-tools-libs-4.4.236-1.el7.elrepo.x86\_64 2/2

Installed:

kernel-lt-tools.x86\_64 0:4.4.236-1.el7.elrepo

Dependency Installed:

kernel-lt-tools-libs.x86\_64 0:4.4.236-1.el7.elrepo

Complete!

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# grep '^menuentry' /boot/grub2/grub.cfg | awk -F"'" '{print $2}'

CentOS Linux (4.4.236-1.el7.elrepo.x86\_64) 7 (Core)

CentOS Linux (3.10.0-1127.el7.x86\_64) 7 (Core)

CentOS Linux (0-rescue-ea2bbf61d23a42c1aa41f3761ba1e87a) 7 (Core)

[root@k8s-node-01 ~]#

[root@k8s-node-01 ~]# grub2-set-default "CentOS Linux (4.4.236-1.el7.elrepo.x86\_64) 7 (Core)"

[root@k8s-node-01 ~]# grub2-editenv list

saved\_entry=CentOS Linux (4.4.236-1.el7.elrepo.x86\_64) 7 (Core)