# 内核升级

#!/bin/bash  
export PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin:/root/bin  
  
if [ $UID -ne 0 ]; then  
echo "Superuser privileges are required to run this script."  
exit 1  
fi  
  
log\_err() {  
 printf "[$(date +'%Y-%m-%dT%H:%M:%S')]: \033[31mERROR: $@ \033[0m\n"  
}  
  
log\_info() {  
 printf "[$(date +'%Y-%m-%dT%H:%M:%S')]: \033[32mINFO: $@ \033[0m\n"  
}  
  
log\_warning() {  
 printf "[$(date +'%Y-%m-%dT%H:%M:%S')]: \033[33mWARNING: $@ \033[0m\n"  
}  
  
sh\_path=$(cd `dirname $0`;pwd)  
LOGDIR=/var/log/init\_record  
if [ ! -d ${LOGDIR} ];then mkdir -vp ${LOGDIR}; fi  
  
upgrade\_kernel() {  
 log\_name=upgrade\_kernel.log  
 succ\_num=$(grep successful ${LOGDIR}/${log\_name}|wc -l)  
 if [ ! -f ${LOGDIR}/${log\_name} -o ${succ\_num} -eq 0 ];then  
 cp -av /etc/grub2.cfg ${BACKUPDIR}/grub2.cfg.kernelupdate.bak |tee -a ${LOGDIR}/${log\_name}  
 log\_info "[\*] CentOS 操作系统内核升级(可选) "  
 rpm --import https://www.elrepo.org/RPM-GPG-KEY-elrepo.org |tee -a ${LOGDIR}/${log\_name}  
 yum -y install https://www.elrepo.org/elrepo-release-7.el7.elrepo.noarch.rpm |tee -a ${LOGDIR}/${log\_name}  
 yum install -y yum-plugin-fastestmirror |tee -a ${LOGDIR}/${log\_name}  
 yum --disablerepo="\*" --enablerepo=elrepo-kernel repolist |tee -a ${LOGDIR}/${log\_name}  
 yum --disablerepo="\*" --enablerepo=elrepo-kernel list kernel\* |tee -a ${LOGDIR}/${log\_name}  
 # 内核安装，服务器里我们选择长期lt版本，安全稳定是我们最大的需求，除非有特殊的需求内核版本需求;  
 yum update -y --enablerepo=elrepo-kernel |tee -a ${LOGDIR}/${log\_name}  
 # 内核版本介绍, lt:longterm 的缩写长期维护版, ml:mainline 的缩写最新主线版本;  
 yum install -y --enablerepo=elrepo-kernel --skip-broken kernel-lt kernel-lt-devel kernel-lt-tools |tee -a ${LOGDIR}/${log\_name}  
 # yum -y --enablerepo=elrepo-kernel --skip-broken install kernel-ml.x86\_64 kernel-ml-devel.x86\_64 kernel-ml-tools.x86\_64  
 log\_warning "[\*] 当前 CentOS 操作系统可切换的内核内核版本" |tee -a ${LOGDIR}/${log\_name}  
 awk -F \' '$1=="menuentry " {print i++ " : " $2}' /etc/grub2.cfg |tee -a ${LOGDIR}/${log\_name}  
 sudo grub2-set-default 0 |tee -a ${LOGDIR}/${log\_name}  
 log\_info "[\*] 操作系统内核升级successful!,接下来重启！ " |tee -a ${LOGDIR}/${log\_name}  
 reboot  
 else  
 log\_info "[\*] 操作系统内核已升级!"  
 fi  
  
}  
main (){  
 upgrade\_kernel  
}  
  
main "$@"