Class 14

Permission

Umask (user file creation mask) = it is numerical value which substract from full permission then assign to file/folder .

Full permission

Directory = 777 = rwxrwxrwx

File = 666 = rw-rw-rw-

Privilege user (root)

Directory = 755 = 777-755 =022

File = 644 = 666-644 =022

Non-privilege user (abc)

Directory = 755 = 777-755 = 022

File = 644 = 666-644 =022

Change the umask

1. Temporary
2. Permanent
1. Temporary =

See the umask = umask

Umask 222 = 777-222 = 555 , file = 666-222 =444

Bash

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2. Permanent
   Specific user
   For all

   Specific user

   Abc
   Vim .bashrc
   Umask 444
   :wq
   Bash

   For all
   Vim /etc/bashrc
   75 umask 002 = non privilege
   76 else
   77 umask 022 = root

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   troubleshoot

1. Break the root password

   2 way

   1 way = restart = 1 line = rd.break (ramdisk) = ctrl+x

   = mount –o remount rw /sysroot (root partition can be editable)

   = chroot /sysroot (root home will /sysroot)

   = passwd root or passwd (for change the root password)

   = touch /.autorelabel (linux = firewall , selinux) = relabeling

   = exit =exit

   2 way

   = restart = 1 line = rd.break selinux=0 (ramdisk) = ctrl+x

   = mount –o remount rw /sysroot (root partition can be editable)

   = chroot /sysroot (root home will /sysroot)

   = passwd root or passwd (for change the root password)

Booting process of linux

1. Hardware boot
2. Boot loader
3. Kernel
4. Inid/systemd
5. Login screen

1. Hardware boot = = power on = POST (power on self test) = BIOS (basic input output system) = first boot device
2. Boot loader = it start the OS
   Linux = LILO , LOLIN , GRUB , GRUB2
3. Kernel = it make interface between hardware and OS
   RHEL 5,6 = iniird (intial ram disk)
   RHEL7,8,9 = initramfs.img (initial ram file system)
4. Initd/systemd = start the services
   RHEL 5,6 - initd
   RHEL 7,8,9 = systemd
   Pstree = see all service
5. Login screen
   User name = /etc/passwd
   Password = /etc/shadow

GRUB corrupt and recover

Rm -rf /boot/grub2/grub.cfg

Init 6

Grub>

Shutdown and go to BIOS and start from OS image

Troubleshooting = rescue a centos linux system = press 1 = chroot /mnt/sysimage

=grub2-mkconfig -o /boot/grub2/grub.cfg

= touch /.autorelabel

Exit

Exit

Give Grub password
Cd /boot/grub2
Grub2-setpassword
New file = user.cfg

Remove the password
Rm user.cfg

Break the grub password
Restart - boot from CD = troublrshooting = rescue a centos linux = press 1 = chroot /mnt/sysimage = cd /boot/grub2 = rm -f user.cfg = exit = exit

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Kernel panic
Cd /boot
Intriramfs-4 -- - img =kernel file
Rm -f initramfs
Init 6

Solve
Go to 2 line
Cd /boot
Uname –r (kernel version) =copy it
Dracut initramfs-paste.img

Make new file forcefully
Mkinitrd --force paste.img paste
Init 6
Start from 1 line