**CHAPTER 15 Accessing Linux File System**

**Topics covered:**

1. Identifying File System and Device

2. Mounting and Unmounting Device

3. Locating Files on the System

**Identifying File System and Device:**

1. Using the "**df -h**" command

--> **/dev/sdX[a-z]** --> SATA, SAS, SCSI, USB, SSD type of hard disk

--> **/dev/haX[a-z]** --> PATA, IDE type of hard disk

--> **/dev/vdX[a-z]** --> virtual KVM hard disk

--> if you see "**/dev/sda1**" and "**/dev/sda2**", this means **two** partitions

--> from this command you can also tell the size of those partitions

2. Using "**blkid**" command to find out the filesystem type

--> RHEL 9.x support for **xfs, vfat, ext2/3/4, msdos, minix**

3. Using "**du -h**" command to find out the usage for directory/folders or partitions

--> "**du -h /var**" to find out how much disk space the "**/var**" directory consumed.

4. Using "**fdisk -l**" command to see how many hard disk on your RHEL OS server

**Mounting and Unmounting Device:**

1. Unless you boot into GNOME-GUI (automatically mounted), partitions/devices have to be **manually mounted**.

2. We need to create a mountpoint first by using the "**mkdir**" command

--> "**mkdir /data**"

3. Using "**mount**" command to manually mount the device

--> **"mount /dev/vdb1 /data"**

4. Using "**df -h**" command to view the newly mounted device

5. To **unmount**, ensure that **no users are in** the newly created folder ie "**/data**"

--> use the “**lsof /data**” command to verify.

6. To unmount, use the "**umount /dev/vdb1**" command or "**umount /data**"

7. Use the "**df -h**" command to verify that the device has been unmounted.

**Locating Files on the System:**

1. Using the "**locate**" or "**find**" command to search for desired files/folders

2. using locate "**locate passwd | grep /etc**" command.

3. The locate command is **less refine** than the "**find**" command

4. Using the "**find**" command has **more feature**. Refer to "man find" for more info.

5. Example of "**find**" command

**--> "find / -iname passwd"**

**--> "find /etc -perm 777"**

**--> "find /home -uid 1000"**

**--> "find /home -user pete"**

**--> "find /home -group hr"**

**--> "find /home -gid 1002"**

**CHAPTER 16 Analysing Server and getting Support**

**Topics Covered:**

1. Analysing and Managing Remote Servers

2. Getting Help from RH Customer Portal

3. Red Hat Insights

**Analysing and Managing Remote Servers:**

1. Enable Web Console for RHEL 9.x. Also known as "**cockpit**"

--> yum install cockpit -y

--> systemctl enable --now cockpit.service

--> firewall-cmd --add-service=cockpit --permanent

--> firewall-cmd --reload

2. To view the web console, go the **https://servera:9090**

3. Log in with "**root**" account.

**Getting Help from RH Customer Portal:**

1. The Red Hat Customer Portal (**https://access.redhat.com**). It may ask you to log in.

2. Create a free personal account.

3. can also use "**sosreport**" command

**Red Hat Insights:**

1. yum install insights-client

2. insights-client --register

**https://cloud.redhat.com/insights.**