

8.3.5 Practice Questions

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Score: 89%

Passing Score: 80%



▼ Question 1:

✓ Correct

Which of the following commands initializes a physical volume?

- ☐ pvscan
- ➡ ☒ pvcreate
- ☐ lvcreate
- ☐ vgcreate

Explanation











The **pvcreate** command initializes physical volumes for later use by the Logical Volume Manager (LVM). LVM provides an alternative method to manage partitions on a Linux system. LVM gives a system administrator more flexibility in allocating storage on a system.

The **pvscan** command scans all disks for physical volumes and displays the result.

The **vgcreate** command creates a new volume group.

The **lvcreate** command creates a new logical volume in a volume group.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)
-  8.3.2 Using LVM
-  8.3.3 LVM Facts



8.4.2 File System Creation

q_lvm_lp5_01.question.fex

▼ Question 2:

✓ Correct

Which of the following commands creates a volume group named *backup* and initializes it by adding the third disk in a Linux system to the volume group?

- ☐ **vgcreate /dev/sdc backup**
- ☐ **vgextend /dev/sdc backup**
- ☐ **lvcreate backup /dev/sdc**
- ➔ ☒ **vgcreate backup /dev/sdc**
- ☐ **pvcreate /dev/sdc backup**

Explanation

The **vgcreate backup /dev/sdc** command creates a volume group named *backup* on the third disk in the system. **vgcreate** is a Logical Volume Manager (LVM) command that creates volume groups. LVM provides an alternative method for managing partitions on a Linux system. LVM gives a system administrator more flexibility in allocating storage on a system.







The **pvcreate** command initializes physical volumes for later use by the Logical Volume Manager (LVM).

The **pvscan** command scans all disks for physical volumes and displays the result.

The **lvcreate** command creates a new logical volume in a volume group.

The **vgextend** command adds one or more initialized physical volumes to an existing volume group to extend its size.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions



8.2.2 Managing GUID Partitions



8.2.3 GUID Partition Management Facts



8.3.1 Logical Volume Manager (LVM)



8.3.2 Using LVM



8.3.3 LVM Facts



8.4.2 File System Creation

q_lvm_lp5_02.question.fex

▼ Question 3: ✕ Incorrect

You are using LVM on your Linux system to manage the existing volumes. After adding and initializing the fourth hard drive to the system and creating a physical volume, what command should you use to add it to the *backup* volume group?













lvcreate

vgextend backup /dev/sdd

Explanation

vgextend backup /dev/sdd adds the physical volume on the fourth hard drive to the *backup* volume group. **vgextend** is a Logical Volume Manager (LVM) command that adds one or more initialized physical volumes to an existing volume group to extend its size. LVM provides an alternative method to manage partitions on a Linux system. LVM gives a system administrator more flexibility while allocating storage on a system.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)
-  8.3.2 Using LVM
-  8.3.3 LVM Facts
-  8.4.2 File System Creation

q_lvm_lp5_03.question.fex

▼ Question 4:













✓ Correct

You are using LVM on your Linux system to manage the existing volumes.
What command do you enter to scan for logical volumes on the system?

**Explanation**

The **lvscan** command is a Logical Volume Manager (LVM) command that scans all known volume groups or all supported LVM block devices in the system for logical volumes. LVM provides an alternative method to manage partitions on a Linux system. LVM gives a system administrator more flexibility while allocating storage on a system.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)
-  8.3.2 Using LVM
-  8.3.3 LVM Facts
-  8.4.2 File System Creation

q_lvm_lp5_04.question.fex

▼ Question 5:

✓ Correct













You are using LVM on your Linux system to manage hard disk partitions.
What command do you enter to scan for physical volumes on the system?



Explanation

The **lvscan** command is a Logical Volume Manager (LVM) command that scans all known volume groups or all supported LVM block devices in the system for logical volumes. LVM provides an alternative method to manage partitions on a Linux system. LVM gives a system administrator more flexibility while allocating storage on a system.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
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-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)
-  8.3.2 Using LVM
-  8.3.3 LVM Facts
-  8.4.2 File System Creation

q_lvm_lp5_05.question.fex

▼ Question 6:

✓ Correct

Which of the following commands creates a logical volume named *video* from the *home* volume group and configures it with 2 TB of disk space?

- ☐ **lvcreate -L 2T -n home video**
- ☐ **vgcreate -L 2T -n home video**
- ☒ **lvcreate -L 2T -n video home**
- ☐ **vgcreate -L 2T -n video home**

Explanation










The **lvcreate -L 2T -n video home** command creates a logical volume named *video* from the *home* volume group and configures it with 2 TB of disk space.

The **lvcreate -L 2T -n home video** command creates a logical volume named *home* from the *video* volume group and configures it with 2 TB of disk space.

The **vgcreate -L 2T -n video home** command is normally used to create physical volumes, but will return an error since there is no **-L** option.

The **vgcreate -L 2T -n home video** command is normally used to create physical volumes, but will return an error since there is no **-L** option.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)



8.3.2 Using LVM



8.3.3 LVM Facts



8.4.2 File System Creation

q_lvm_lp5_06.question.fex

▼ Question 7:

✓ Correct

Which of the following steps must be completed after creating a logical volumes so that the logical volume can be used to store files?

- ☐ Scan for logical volumes and extend them.
- ☐ Add the volume to a volume group and mount the group in the file system.
- ☐ Give the volume a descriptive name and allocate space to it.
- ➔ ☒ Create file systems on the volumes and mount them.

Explanation

After logical volumes have been created, the next step is to create file systems on them and then mount them:

- A file system is create using `mkfs`, just as with traditional partitions. Use the following syntax:

`mkfs -t file_system /dev/volume_group/logical_volume`

- You can mount a logical volume using the `mount` command, just as you would to mount file systems on traditional partitions. Use the following syntax:




`mount -t file_system /dev/volume_group/logical_volume/mount_point`

Scanning for logical volumes and extending them is not the next step.

Giving the logical volume a descriptive name and allocating space to it is not the next step.

Adding the volume to a volume group and mounting the group in the file system is not the next step.

References

-  8.1.1 MBR Disk Partitions
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 8.1.5 Device Naming Facts

 8.2.1 GUID Partitions


 8.2.2 Managing GUID Partitions

 8.2.3 GUID Partition Management Facts

 8.3.1 Logical Volume Manager (LVM)

 8.3.2 Using LVM

 8.3.3 LVM Facts

 8.4.2 File System Creation

q_lvm_lp5_07.question.fex

▼ Question 8:

✓ Correct

You have added a third hard disk to your Linux system.

What command would you use to initialize a physical volume on this disk for later use by the Logical Volume Manager?













```
pvcreate /dev/sdc
```



Explanation

Enter **`pvcreate /dev/sdc`** to initialize a physical volume on the third hard disk for later use by LVM.

References

-  8.1.1 MBR Disk Partitions
-  8.1.2 Managing MBR Partitions
-  8.1.3 Viewing MBR Partitions
-  8.1.4 MBR Partition Management Facts
-  8.1.5 Device Naming Facts
-  8.2.1 GUID Partitions
-  8.2.2 Managing GUID Partitions
-  8.2.3 GUID Partition Management Facts
-  8.3.1 Logical Volume Manager (LVM)
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-  8.4.2 File System Creation

q_lvm_lp5_08.question.fex

▼ Question 9:

✓ Correct

Which of the following utilities is used to manage and monitor software RAID devices?

➡ ☒ **mdadm**

☐ /dev/mapper

☐ lvscan

☐ pvscan

Explanation

mdadm is a utility used to manage and monitor software RAID devices.

/dev/mapper is the directory where logical volumes and RAID devices can be found.

lvscan scans all known volume groups in the system for logical volumes and displays the result.

pvscan scans all disks for physical volumes and displays all found physical volumes on the system and their associated volume groups.

References

▶ 8.3.1 Logical Volume Manager (LVM)

🖥️ 8.3.2 Using LVM

⚙️ 8.3.3 LVM Facts

q_lvm_lp5_device_mapper.question.fex