

SECTION 5 Work with File Systems

In this section of the workbook, you learn how to do the following:

- “Use YaST to Administer LVM” on 5-1
- “Understand submount” on 5-3

Exercise 5-1 Use YaST to Administer LVM

To use YaST to administer LVM, complete the following:

1. Ensure you are logged in to your server’s GUI as **geeko** with a password of **N0v3ll**.
2. Start YaST by selecting on its desktop icon.
3. Enter the root password of **novell**.
4. On the left, select **System**.
5. On the right, select **Partitioner**.
6. Read the warning and select **Yes**.
7. Select **Create**.
8. In the End field, enter **+200M**.
9. Select **Do Not Format**, then select **0x8E Linux LVM** from the File System ID drop-down menu.
10. Select **OK**.
To create another LVM partition, redo the previous steps.
11. To apply your changes, select **Apply**.
12. Read the warning and select **Finish**.
13. On the right in the YaST screen, select **LVM**.

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To create another LVM partition, redo the previous steps.
11. To apply your changes, select **Apply**.
12. Read the warning and select **Finish**.
13. On the right in the YaST screen, select **LVM**.

14. Select the first partition you just created from Physical Volumes.
15. Add it to the volume group “system” by selecting **Add Volume**.
16. Do the same with the second partition by selecting it; then select **Add Volume**.
17. To add a logical volume, select **Add** on the left.
18. Enter **data** as the logical volume name.
19. Enter **200 MB** as size.
20. Enter **/data** as the mount point.
21. Select **Finish**; then select **OK** in the message box.
22. Leave YaST by selecting **Close**.
23. Open a terminal window by doing the following:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
24. Enter **ls /**.
25. Verify that there is an entry **/data** now.
26. In the console window, enter **df**.

There should be an entry for **/data** now.

(End of Exercise)

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There should be an entry for **/data** now.

(End of Exercise)

Exercise 5-2 Understand submount

To understand **submount**, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
3. To get root privileges with access to the X Window system, enter **sux -** and a password of **novell**.
4. Search `/etc/fstab` for submount entries by entering **grep subfs /etc/fstab**

On most systems you will see two entries:

 - One for your CD drive.
 - One for your floppy drive.
5. In the terminal window, enter **tail -f /var/log/messages**

Monitor the kernel messages you see during Step 6.
6. Insert a CD into your drive.
7. Launch another terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
8. In this second terminal window, enter **cd /media/cdrom**
9. To view the content of the CD, enter **ls -l**.

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 - b. Enter **konsole**.
 - c. Select **Run**.
8. In this second terminal window, enter **cd /media/cdrom**
9. To view the content of the CD, enter **ls -l**.

10. Verify that you see the content of the CD on your second terminal window.
11. Verify that you see messages like the example given below in your first terminal window.

```
Jun 21 8:44:38 DA3 submountd: resmgr: server response code 200
Jun 21 8:44:39 DA3 kernel: ISO 9660 Extensions: Microsoft Joliet Level 3
Jun 21 8:44:39 DA3 kernel: ISO 9660 Extensions: RRIP_1991A
```

(End of Exercise)

10. Verify that you see the content of the CD on your second terminal window.
11. Verify that you see messages like the example given below in your first terminal window.

```
Jun 21 8:44:38 DA3 submountd: resmgr: server response code 200
Jun 21 8:44:39 DA3 kernel: ISO 9660 Extensions: Microsoft Joliet Level 3
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(End of Exercise)