This article provides steps for extending the root partition residing in a logical volume created with Logical Volume Manager (LVM) in a virtual machine running Lucy. A more complete guide with screenshots can be found

here

.

Caution: We recommend to take a complete backup of the virtual machine prior to making these changes.

1. Power off the virtual machine.
2. Edit the virtual machine settings and extend the virtual disk size.
For more information, see Increasing the size of a virtual disk (1004047).
3. Power on the virtual machine.
4. Print the partition table to verify the number of partitions by running the command:
fdisk -l
By default, there are 3: sda1, sda2 and sda5.
4. Create a new primary partition - sda3:
a) Run the command:
fdisk /dev/sda
b) Press <n> to create a new primary partition.
c) Press <p> for primary.
d) Press <3> for the partition number.
e) Press <Enter> two times.
f) Press <t> to change the system's partition ID.
g) Press <3> to select the newly creation partition.
h) Type 8e to change the Hex Code of the partition for Linux LVM.
i) Press <w> to write the changes to the partition table.
5. Restart the virtual machine:
shutdown -r now
7. Verify whether sda3 has successfully created, by running the command:
fdisk -l
8. Create another primary partition sda4:
a) Run the command:
fdisk /dev/sda
b) Press <n> to create a new primary partition.
c) Press <p> for primary.
Note. The number of partition <4> was selected automatically.
d) Press <Enter> two times.
e) Press <t> to change the system's partition ID.
f) Press <4> to select the newly creation partition.
g) Type 8e to change the Hex Code of the partition for Linux LVM.
h) Press <w> to write the changes to the partition table.
9. Restart the virtual machine once again:
shutdown -r now
10. Verify whether sda4 has successfully created, by running the command:
fdisk -l
11. Run this command to convert the new partition to a physical volume:
pvcreate /dev/sda4
12. Run this command to extend the physical volume:
vgextend phishing /dev/sda4

13. Run this command to verify how many physical extents are available to the Volume Group:

vgdisplay phishing | grep "Free"

14. Run the following command to extend the Logical Volume:

lvextend -L+#G /dev/phishing/root

Where <#> is the number of Free space in GB available as per the previous command. Use the full number output from Step 13 including any decimals.

15. Run the following command to expand the ext3 filesystem online, inside of the Logical Volume:

resize2fs /dev/phishing/root

16. Run the following command to verify that the / filesystem has the new space available:

df -h

From:
https://wiki.lucysecurity.com/ - **LUCY**

Permanent link:
https://wiki.lucysecurity.com/doku.php?id=extending_a_logical_volume_in_vmware_machine&rev=1511206120

Last update: **2019/07/25 12:51**