Create Shared Directory Between Host and Guest KVM Debian 11

Preparation

a. Cek GID of libvirt user

$ ps ax -l | grep qemu

As shown below : GID (64055)

```
lenovo@lenovo-3354c7a:~$ ps ax -l  | grep qemu
6 S 64055    5434       1 29  80   0 - 747403 -     ?          3:15 /usr/bin/qemu-
```

b. Cek User Libvirt Qemu and verify its GID, grep by its group

$ cat /etc/passwd | grep «libvirt-qemu»

As shown below :

```
lenovo@lenovo-3354c7a:~$ cat /etc/passwd | grep "libvirt-qemu"
libvirt-qemu:x:64055:106:Libvirt Qemu,,,:/var/lib/libvirt:/usr/sbin/nologin
```

c. Verify group libvirt-qemu and its user

$ sudo getent group | grep libvirt-qemu

Adding User to libvirt-qemu Group

a. Add user to libvirt-qemu

$ sudo usermod -a -G libvirt-qemu $(whoami)

a. Verify user has been added to the group

$ id $(whoami)

As shown below :

```
lenovo@lenovo-3354c7a:~/Share$ id $(whoami)
uid=1000(lenovo) gid=1002(lenovo) groups=1002(lenovo),4(adm),24(cdrom),27(sudo),
(dip),46(plugdev),112(bluetooth),1000(lpadmin),1001(sambashare),998(bumblebee),1
(libvirt),64055(libvirt-qemu)
```

or

$ sudo getent group | grep libvirt-qemu

As shown below :

```
lenovo@lenovo-3354c7a:~/Share$ sudo getent group | grep libvirt-qemu
libvirt-qemu:x:64055:libvirt-qemu,lenovo
lenovo@lenovo-3354c7a:~/Share$
```

Modified libvirt Daemon Config

a. Edit /etc/libvirt/libvirtd.conf

$ sudo nano /etc/libvirt/libvirtd.conf

- Look for unix_sock_group and uncomment it, change its value to libvirt-qemu (debian 11).
- Look unix_sock_rw_perms and uncomment it

b. Restart libvirt daemon

$ sudo systemctl restart libvirtd.service

Create Share Directory

a. Create directory

$ mkdir Share

b. Change permission both host and guest to read and write

chmod -R 0777 Share

c. Change group of Share directory to libvirt-qemu

$ sudo chgrp libvirt-qemu Share/

c. Verify directory change

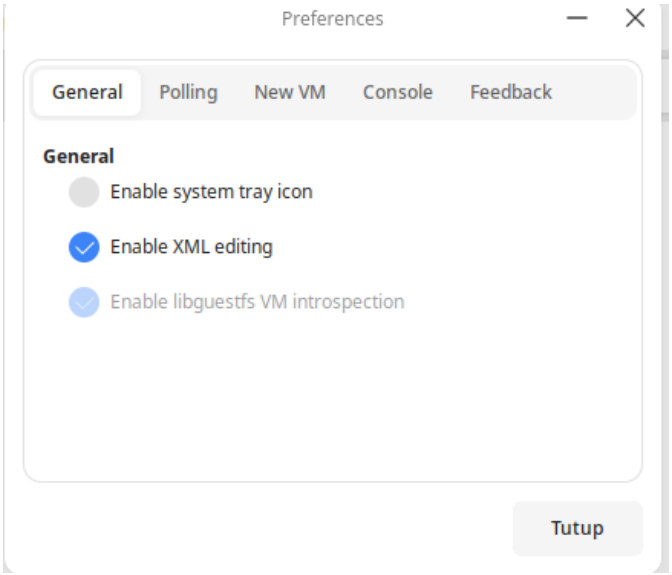
$ ls -lad Share/

As shown below :

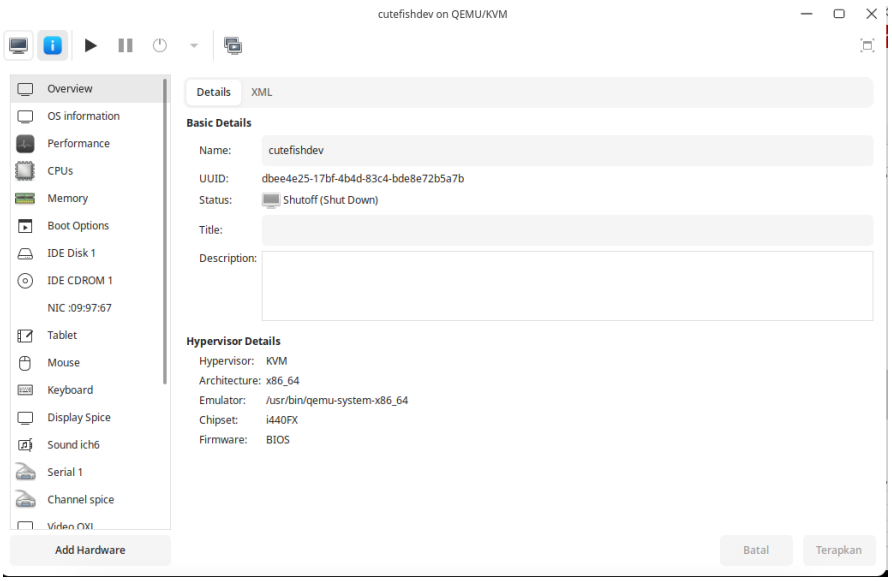
```
lenovo@lenovo-3354c7a:~$ ls -lad Share/
drwxrwxrwx 2 lenovo libvirt-qemu 4096 Jun 12 18:33 Share/
lenovo@lenovo-3354c7a:~$
```

Setting the KVM

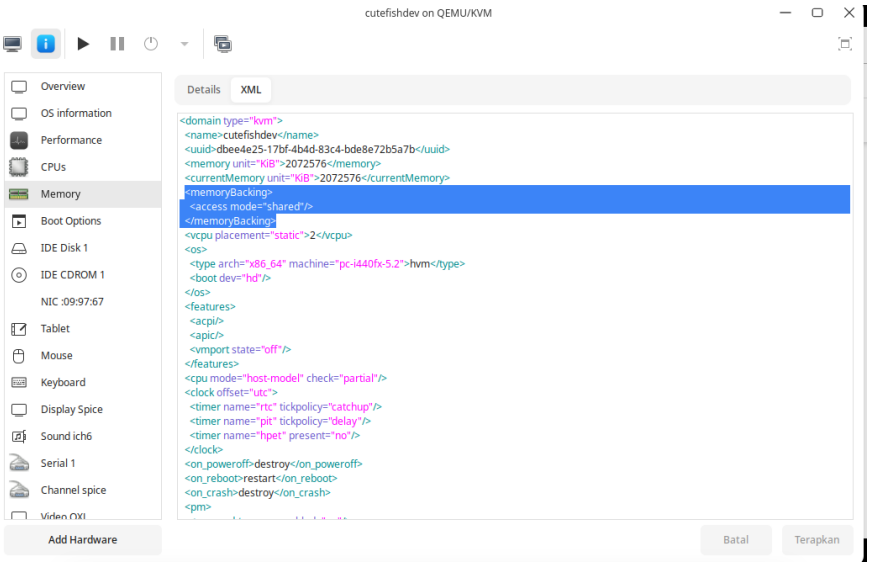
a. Enable XML editing
On KVM manager click edit in the menu bar, select Edit and select preference. On Preference Dialog, check enable XML editing option at the General tab



b. Add XML element and attribute access mode «Shared»
1. On KVM manager, click on the icon open vm, in toolbar menu, and clik on show virtual hardware details.



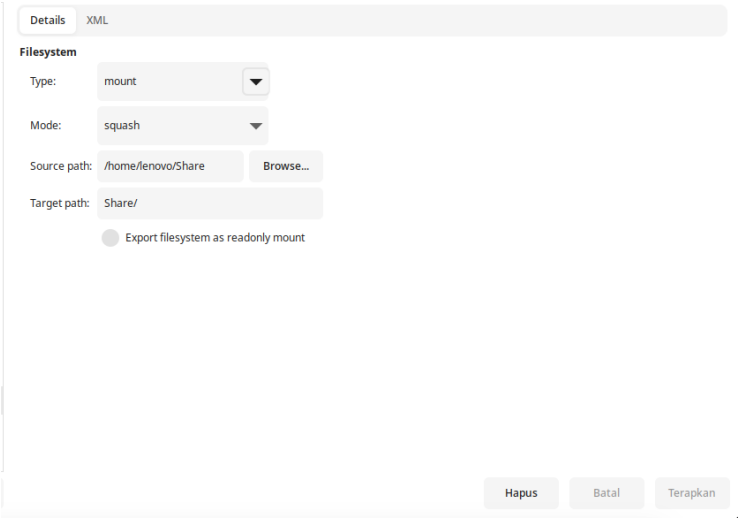
2. Clik on the left pane «Memory», and click xml tab on the right pane. Add xml element under <currentMemory>. And click apply.



Add code below under <currentMemory> element

```
<memoryBacking>
   <access mode="shared"/>
 </memoryBacking>
```

c. Add File System : Shared
Click Add Hardware on left bottom VM hardware details, select File System on the left pane. On the right pane, select Type : mount, Mode : **Squash**, Source Path : /path/to/shared_dir (In the Host OS), Target Path: name_of_mount_point/. And click apply



Mount Share Directory in Guest OS

a. Create mount point for Share file system

```
$ mkdir Share
```

b. Change permission of Share directory to full read and write

```
$ chmod -R 0777
```

c. Mount Share directory

```
$ sudo mount -t 9p -o trans=virtio Share/ /home/lenovo/Share
```

If file created by guest os, not being editable by host os, then manualy change permission with 0777, in the guest os.