

Ex.No. 1 (a)	INSTALLATION AND CONFIGURATION OF LINUX
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Aim:

To install and configure Linux operating system in a Virtual Machine.

1. Install the required packages for virtualization `dnf install xen virt-manager qemu libvirt`
2. Configure xen to start up on boot `systemctl enable virt-manager.service`
3. Reboot the machine `Reboot`
4. Create Virtual machine by first running `virt-manager virt-manager &`
5. Click on File and then click to connect to localhost
6. In the base menu, right click on the localhost(QEMU) to create a new VM
7. Select Linux ISO image
8. Choose puppy-linux.iso then kernel version
9. Select CPU and RAM limits
10. Create default disk image to 8 GB
11. Click finish for creating the new VM with PuppyLinux

Output:

Step 1: Install required virtualization packages

Open a terminal and run:

`bash Copy code sudo dnf install xen virt-manager qemu libvirt -y`

Step 2: Enable virt-manager to start on boot `sudo systemctl enable virt-manager.service`

Step 3: Reboot the system

`sudo reboot` Step 4: Launch Virtual Machine Manager

After reboot, open terminal and run: `virt-manager &`

Step 5: Connect to localhost

- In the Virtual Machine Manager window, click File > Add Connection (if not already connected).
- Select QEMU/KVM > Click Connect to localhost. Step 6: Create a new Virtual Machine
- Right-click on localhost (QEMU) > New.

Step 7: Select Installation Media

- Choose Local install media (ISO image or CDROM).
- Click Forward.

Step 8: Choose ISO image

- Click Browse, then Browse Local to locate your puppy-linux.iso.
- Set OS type to Linux and version appropriately (e.g., Generic Linux 2020 or similar).
- Click Forward.

Step 9: Allocate CPU and Memory

- Assign RAM (e.g., 1024 MB or more depending on your system).
- Assign CPU cores (e.g., 1 or 2). Step 10: Create disk image
- Choose Create a disk image for the virtual machine.
- Set disk size to 8 GB (default disk image).
- Click Forward. Step 11: Final Settings and Create VM
- Name the VM (e.g., PuppyLinux).
- Check "Customize configuration before install" (optional for advanced users).
- Click Finish.

RESULT:

LINUX operating system in a virtual machine is successfully installed.