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.

Installation/Configuration Steps:

1. Install the required packages for virtualization

dnf install xen virt-manager qemu libvirt

2. Configure xend 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 PuppyLinu

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 vrtual machine is successfully installed and configured.