

**Ex No: 1a)                      INSTALLATION AND CONFIGURATION OF LINUX****Date:22.01.25****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 virtual machine is successfully installed and configured