1. Install KVM and Necessary Packages

First, you need to install KVM and other related packages:

bash

sudo dnf install @virt virt-install libvirt libvirt-daemon-kvm qemu-kvm virt-manager virt-viewer

2. Enable and Start the Libvirt Service

Enable and start the libvirt service so it starts automatically on boot:

bash

sudo systemctl enable --now libvirtd

3. Verify KVM Installation

Check if KVM is installed correctly:

bash

sudo virsh list --all

If you see an empty list, KVM is installed and running correctly.

4. Configure Storage for VMs

Create the directory where your VM images will be stored:

bash

sudo mkdir -p /sto/KVM

sudo chown libvirt-qemu:libvirt-qemu /sto/KVM

Then, set up a storage pool in libvirt to use this directory:

bash

sudo virsh pool-define-as KVM-pool dir - - - - "/sto/KVM"

sudo virsh pool-build KVM-pool

sudo virsh pool-start KVM-pool

sudo virsh pool-autostart KVM-pool

5. Create a Rocky 9 Management Server VM with GUI

You can use the virt-install command to create a new VM. Replace the ISO path with the path to your Rocky 9 ISO:

bash

sudo virt-install \

--name rocky9-gui \

--ram 4096 \

--vcpus 2 \

--disk path=/sto/KVM/rocky9-gui.qcow2,size=40 \

--os-variant rocky9.0 \

--graphics spice \

--cdrom /path/to/rocky9.iso \

--network network=default \

--console pty,target\_type=serial

6. Connect to the VM

You can use virt-manager to manage your VMs graphically or use virsh for command-line management.

To connect to the VM using virt-manager:

bash

virt-manager

Or, to connect to the console using virsh:

bash

sudo virsh console rocky9-gui

7. Post-Installation Setup for the VM

Once the installation of Rocky 9 with GUI is complete:

Update the VM using dnf update.

Install any additional software or packages needed for your management tasks.

Set up network configurations and other custom settings as needed.

8. Optional: Autostart the VM

To ensure the VM starts automatically with the host:

bash

sudo virsh autostart rocky9-gui

9. Ongoing Management

You can manage your VMs using virt-manager for a GUI interface or virsh commands for more control via CLI.

This setup should get your KVM environment ready to host multiple VMs, with your Rocky 9 management server ready to manage them. If you encounter any issues or have more questions as you proceed, feel free to ask!