

# Installing Virtualization Components

## WHAT?

A virtualization host needs tools to provide virtualization services to guest systems.

## WHY?

You want to configure a host to run multiple virtualized guest systems under a preferred hypervisor.

## EFFORT

Less than 10 minutes is enough to study and install needed virtualization components.

## GOAL

You can turn a SLES host system into a virtualization host easily.

## REQUIREMENTS

- A bare-metal host that complies with minimal hardware requirements for SLES.

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# 1 Introduction

To run a virtualization server (VM Host Server) that can host multiple guest systems (VM Guests), you need to install required virtualization components on the server. These components vary depending on which virtualization technology you want to use.

You can install the virtualization tools required to run a VM Host Server in one of the following ways:

- By selecting a specific system role during a SUSE Linux Enterprise Server installation on the VM Host Server
- By installing specific installation patterns on an already installed SUSE Linux Enterprise Server host
- By running the *YaST Virtualization* module on an already installed SUSE Linux Enterprise Server host

## 2 Specifying a system role

This topic describes how to install virtualization components by specifying a system role during the SLES installation.

1. Start the SLES installation and follow the instructions until you reach the *System Role* screen.

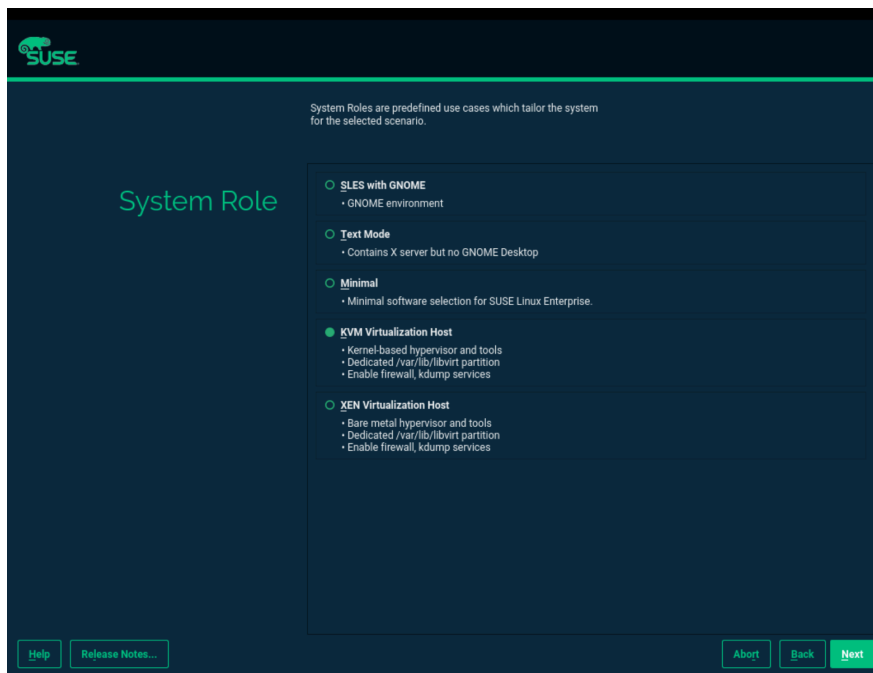


FIGURE 1: SYSTEM ROLE SCREEN

2. On the *System Role* screen, select either the *KVM Virtualization Host* or the *Xen Virtualization Host* role. The appropriate software selection and setup are automatically performed during the SUSE Linux Enterprise Server installation.



### Important

Both virtualization system roles create a dedicated `/var/lib/libvirt` partition and enable the `firewalld` and `Kdump` services.

## 3 Specifying installation patterns

Related software packages from SUSE Linux Enterprise Server software repositories are organized into *installation patterns*. You can use these patterns to install specific virtualization components on an already running SUSE Linux Enterprise Server system. Use **zypper** to install the patterns, for example:

```
> sudo zypper install -t pattern kvm_server
```

#### kvm\_server

Installs a basic VM Host Server with the KVM and QEMU environments.

#### kvm\_tools

Installs libvirt tools for managing and monitoring VM Guests in the KVM environment.

#### xen\_server

Installs a basic Xen VM Host Server.

#### xen\_tools

Installs libvirt tools for managing and monitoring VM Guests in the Xen environment.

## 4 Using the YaST virtualization module

This topic describes how to install virtualization components on an already installed SLES system using YaST.



### Tip


The *YaST Virtualization* module is included in the `yast2-vm` package. Verify it is installed on the VM Host Server before installing virtualization components.

1. Start YaST and select *Virtualization > Install Hypervisor and Tools*.
2.
  - a. Select *KVM server* for a minimal installation of the QEMU and KVM environment. To use the libvirt-based management stack with KVM as well, select *KVM tools*.
  - b. Select *Xen server* for a minimal installation of the Xen environment. To use the libvirt-based management stack with Xen as well, select *Xen tools*.
3. YaST offers to automatically configure a network bridge on the VM Host Server. It ensures proper networking capabilities of the VM Guest. Agree to do so by selecting *Yes*, otherwise choose *No*.
4. After the setup has been finished, you can start creating and configuring VM Guests. Re-booting the VM Host Server is not required.

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