

SLES Minimal VM

WHAT?

A high-level overview of SLES Minimal VM.

WHY?

You want to know what SLES Minimal VM can do for you.

GOAL

Get an understanding of what SLES Minimal VM is and what it can be used for.

EFFORT

7 minutes of reading time.

REQUIREMENTS

General familiarity with SUSE Linux Enterprise Server.

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1 Introduction to SLES Minimal VM

1.1 What is SLES Minimal VM?

You can easily figure out what SLES Minimal VM is and what it does from its name. The SLES part reveals that it is a product derived from SUSE Linux Enterprise Server. Minimal means that you are getting a substantially slimmed-down version of SLES. And the VM abbreviation (it stands for Virtual Machine) points to the main usage scenario SLES Minimal VM is built for: it can act as a foundation for building systems for use in a data center, creating virtual application images, and building appliances. In other words, SLES Minimal VM is a nimble and versatile SLES variant that you can tailor for a wide range of uses.

Because SLES Minimal VM is based on SUSE Linux Enterprise Server, this gives you several important advantages right out of the box.

- Since both systems share the same code base, you do not have to certify SLES Minimal VM if you already have SLES certification.
- The fact that you can customize SLES Minimal VM by installing only the required components and nothing else means that there are fewer packages to manage and patches to apply. This also reduces the attack surface, thus making the resulting system more secure.
- SLES Minimal VM features a lightweight Linux kernel, and the system is easy to deploy, extend, and customize.

1.2 Highlights

- SLES Minimal VM is available as preconfigured and ready-to-run virtual machine images.
- The supplied <u>jeos-firstboot</u> wizard runs on the first boot and allows you to configure basic settings, such as system locales and the root password. SLES Minimal VM for OpenStack uses cloud-init for configuring OpenStack instances.
- SLES Minimal VM comes with the SSH server enabled by default and excluded from the firewall configuration. This means that you can establish an SSH connection to the running system without any further configuration.

- The default network configuration is set to use DHCP, and the system automatically creates a Btrfs snapshot of the initial configuration. The latter means that you can easily revert all subsequent changes, if necessary.
- SLES Minimal VM images use the <u>kernel-default-base</u> as the default kernel, which results in a smaller footprint.
- You can use the supplied KIWI templates to create customized SLES Minimal VM images.
- As openSUSE Leap Minimal VM and SLES Minimal VM are very similar, it is easy to migrate from the former to the latter.

1.3 Keep in mind

- By default, SLES Minimal VM has no software channels. You need to register your system to access online channels.
- While SUSE Linux Enterprise Server calculates the disk layout during installation, SLES
 Minimal VM features the following fixed virtual image partitioning scheme (2MB BIOS
 boot, 33MB EFI boot, 24GB Linux file system). To get additional disk space, you can either extend the existing disk from the virtual host or add a secondary disk to the virtual
 machine.
- SLES Minimal VM images have systemd-coredump disabled by default.

1.4 Flavors

While you can use SLES Minimal VM as a foundation for creating a custom system for a specific use case, that does not mean you have to start from scratch every time you need to build a custom image. Instead, you can choose the following deployment targets from several readymade images:

- Fully Virtual SLES Minimal VM for KVM and Xen (FV/HVM)
- SLES Minimal VM for VMware
- SLES Minimal VM for Microsoft Hyper-V
- SLES Minimal VM for OpenStack

- Paravirtual SLES Minimal VM for Xen (PV)
- Fully Virtual SLES Minimal VM for KVM for AArch64

1.5 Next step

To learn more about SLES Minimal VM, read the official documentation (https://suse-doc.github.io/doc-sle/main/html/SLES-minimal-vm/) ▶.

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