Installation Quick Start

SUSE Linux Enterprise Server 12 SP5

Lists the system requirements and guides you step-by-step through the installation of SUSE Linux Enterprise Server from DVD, or from an ISO image.

Use the following procedures to install a new version of SUSE® Linux Enterprise Server 12 SP5. This document gives a quick overview on how to run through a default installation of SUSE Linux Enterprise Server for the AMD64/Intel 64 architecture.

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Contents

1 Welcome to SUSE Linux Enterprise Server 2

2 Legal Notice 16

3 GNU Free Documentation License 17

1 Welcome to SUSE Linux Enterprise Server

For more detailed installation instructions and deployment strategies, see the SUSE Linux Enterprise Server Documentation at https://documentation.suse.com/.

1.1 Minimum System Requirements

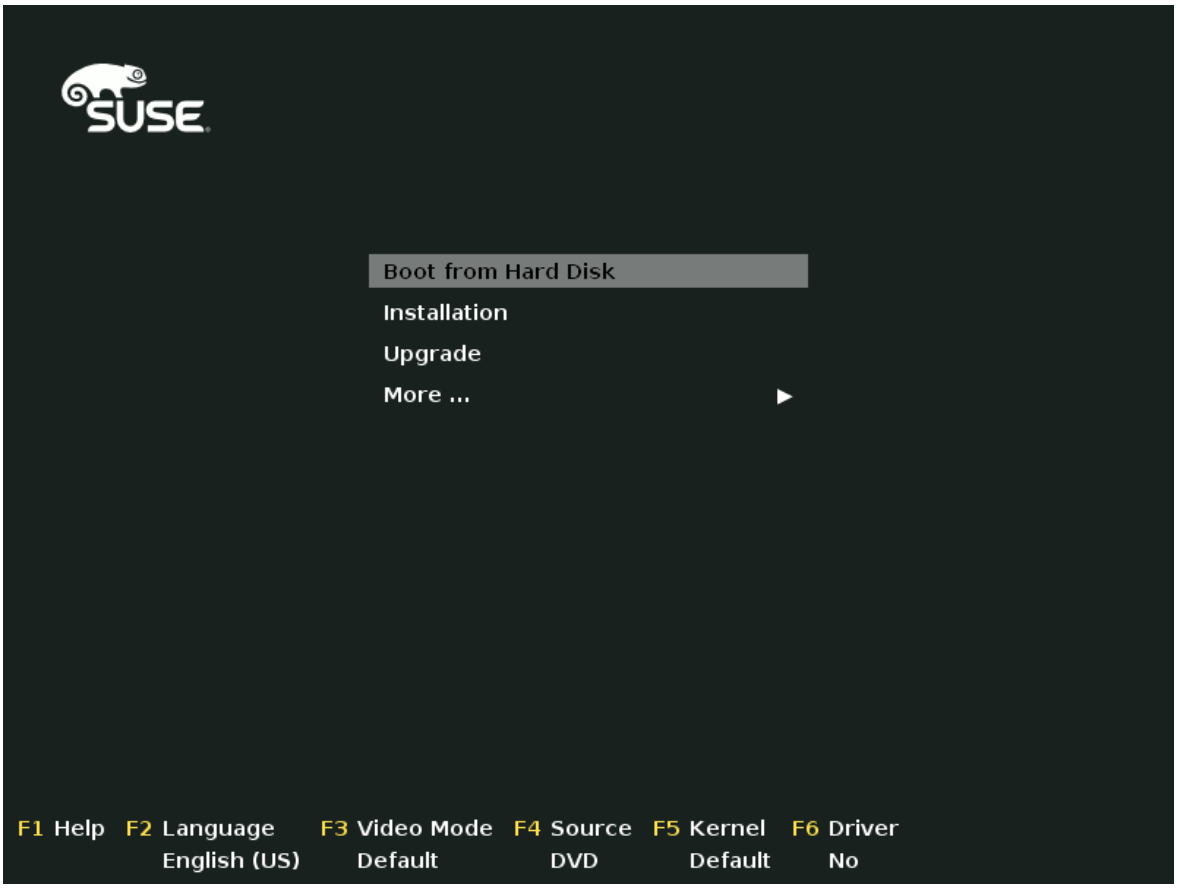
- any AMD64/Intel* EM64T processor (32-bit processors are not supported)
- 512 MB physical RAM (1 GB or more recommended)
- 3.5 GB available disk space (more recommended)
- 800 x 600 display resolution (1024 x 768 or higher recommended)

1.2 Installing SUSE Linux Enterprise Server

Use these instructions if there is no existing Linux system on your machine, or if you want to replace an existing Linux system.

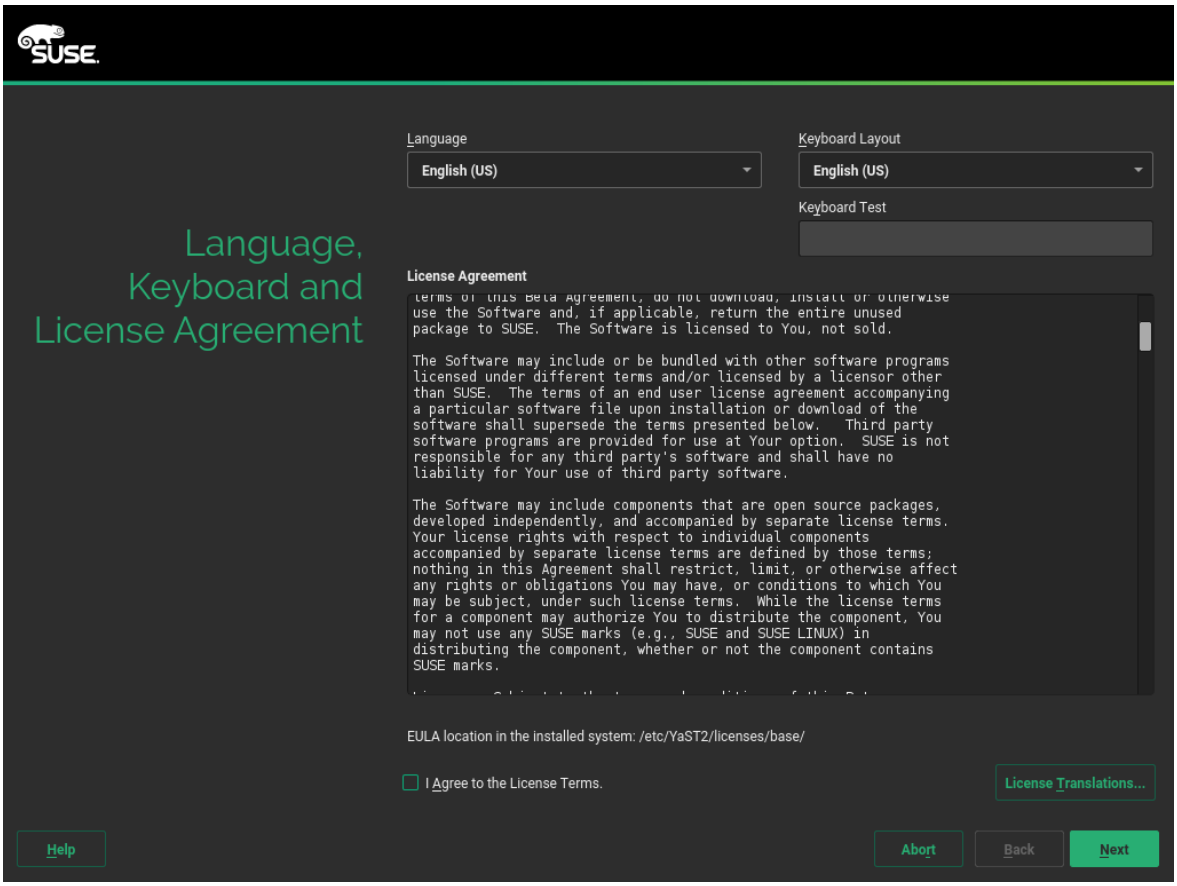
1. Insert the SUSE Linux Enterprise Server DVD into the drive, then reboot the computer to start the installation program. On machines with a traditional BIOS you will see the graphical boot screen shown below. On machines equipped with UEFI, a slightly different boot screen is used. Secure boot on UEFI machines is supported.

   Use F2 to change the language for the installer. A corresponding keyboard layout is chosen automatically. See *Book "Deployment Guide", Chapter 6 "Installation with YaST", Section 6.2.2.1 "The Boot Screen on Machines Equipped with Traditional BIOS"* or *Book "Deployment Guide", Chapter 6 "Installation with YaST", Section 6.2.2.2 "The Boot Screen on Machines Equipped with UEFI"* for more information about changing boot options.



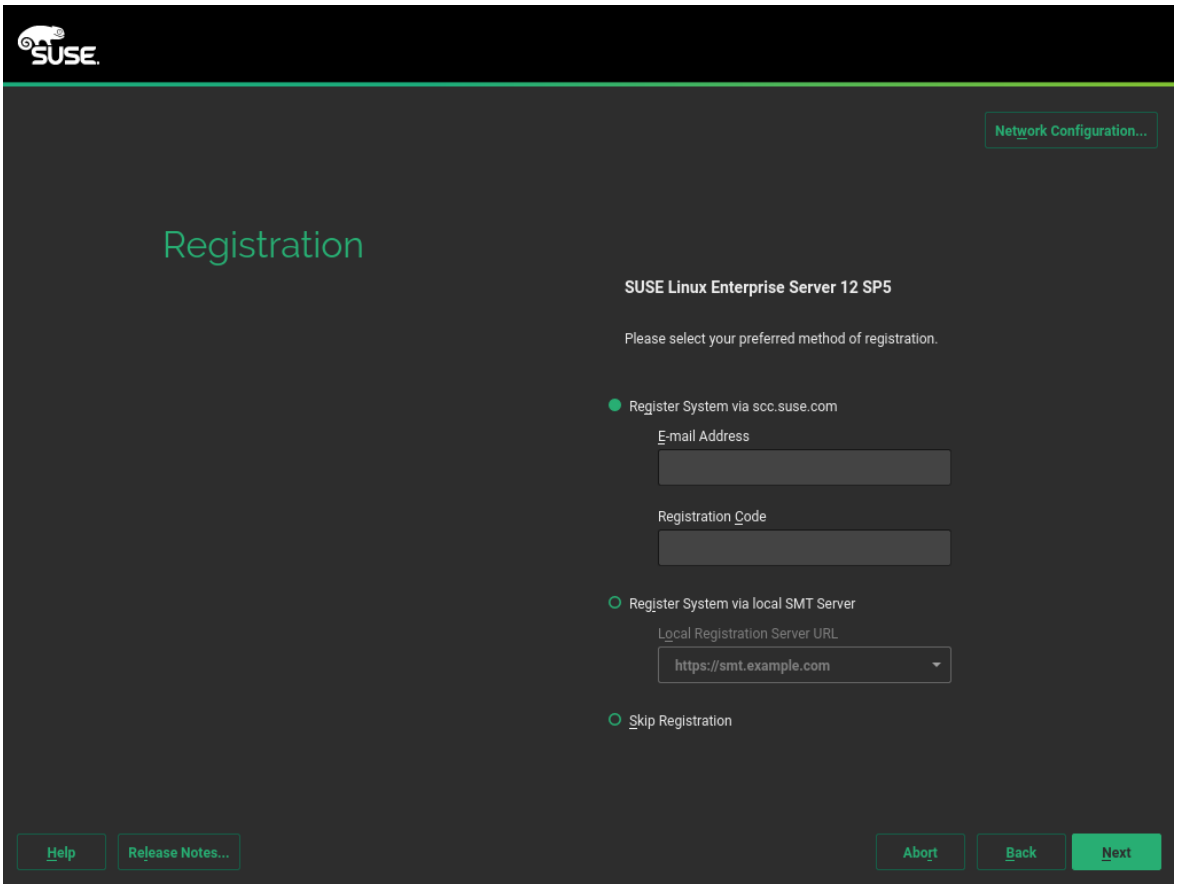
2. Select *Installation* on the boot screen, then press Enter. This boots the system and loads the SUSE Linux Enterprise Server installer.

3. The *Language* and *Keyboard Layout* are initialized with the language settings you have chosen on the boot screen. Change them here, if necessary.
   Read the License Agreement. It is presented in the language you have chosen on the boot screen. *License Translations* are available. You need to accept the agreement by checking *I Agree to the License Terms* to install SUSE Linux Enterprise Server. Proceed with *Next*.



4. A system analysis is performed, where the installer probes for storage devices, and tries to find other installed systems. If the network could not be automatically configured while starting the installation system, the *Network Settings* dialog opens.

   After at least one network interface has been configured you can register your system at the SUSE Customer Center (SCC). Enter the e-mail address associated with your SCC account and the registration code for SUSE Linux Enterprise Server. A successful registration is a prerequisite for getting product updates and being entitled to technical support. Proceed with *Next*.



Tip: Installing Product Patches at Installation Time

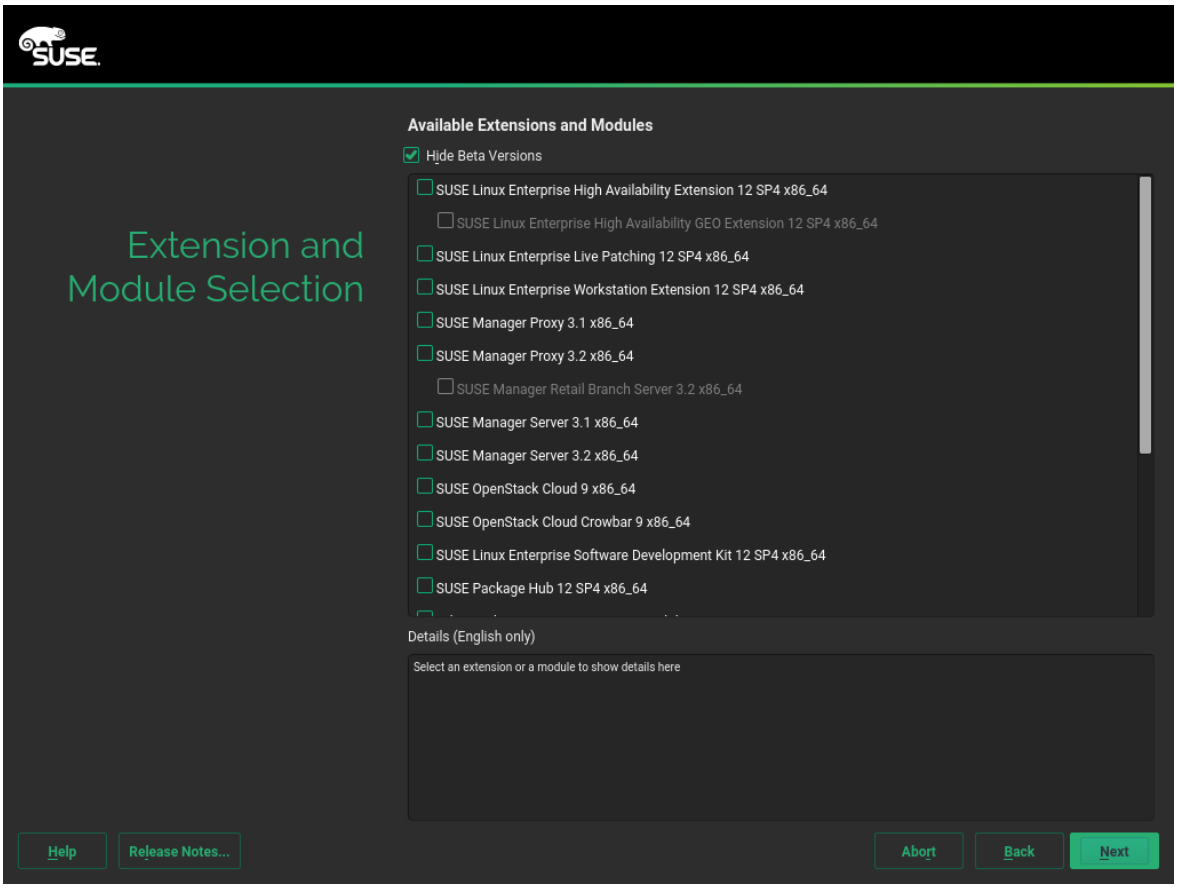
If SUSE Linux Enterprise Server has been successfully registered at the SUSE Customer Center, you are asked whether to install the latest available online updates during the installation. If choosing *Yes*, the system will be installed with the most current packages without having to apply the updates after installation. Activating this option is recommended.

Note: Release Notes

From this point on, the Release Notes can be viewed from any screen during the installation process by selecting *Release Notes*.

5. After the system is successfully registered, YaST lists modules and extensions that are available for SUSE Linux Enterprise Server from the SUSE Customer Center. The list contains free modules, such as the SUSE Linux Enterprise SDK, or extensions requiring a

registration key that is liable for costs. Click an entry to see its description. Optionally select a module or extension for installation by activating its check mark. Proceed with *Next*.



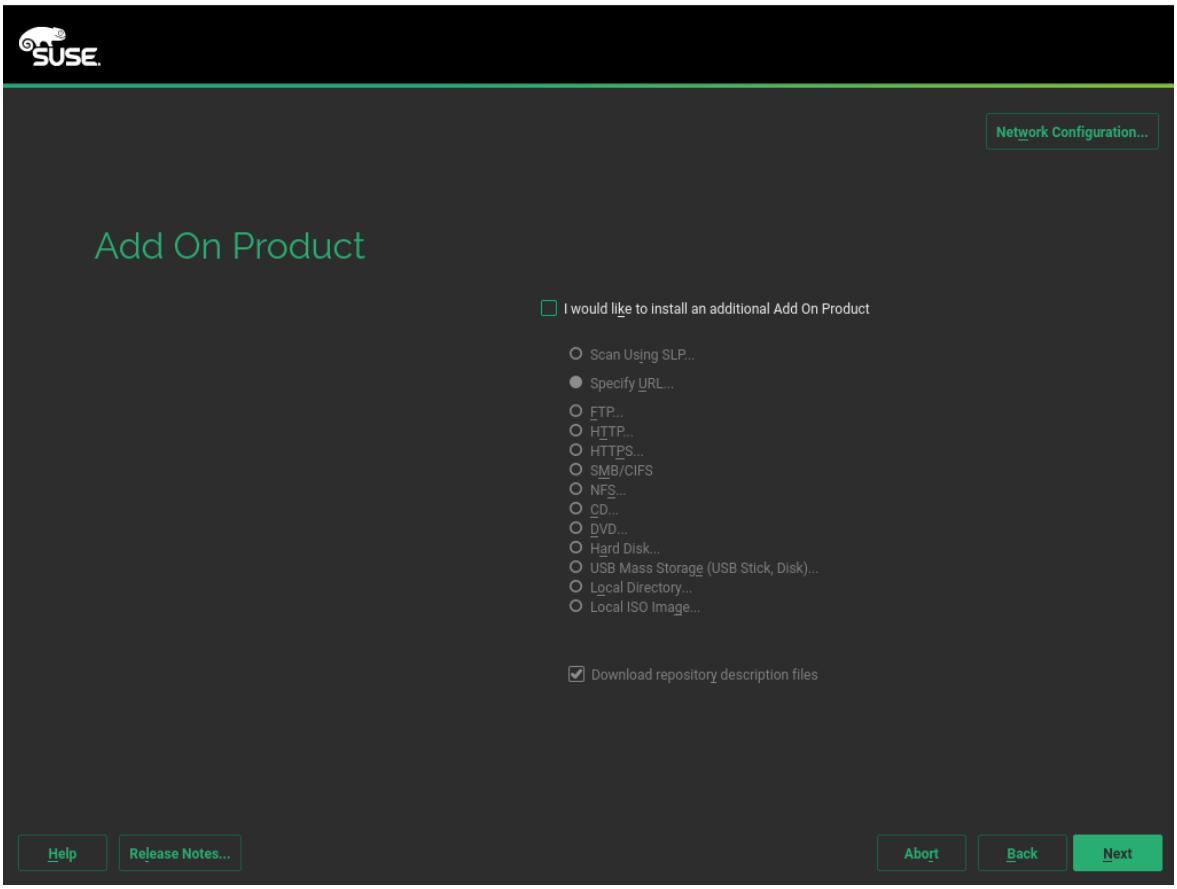
6. The *Add-on Product* dialog allows you to add additional software sources (so-called "repositories") to SUSE Linux Enterprise Server, that are not provided by the SUSE Customer Center. Such add-on products may include third-party products and drivers or additional software for your system.

Tip: Adding Drivers During the Installation

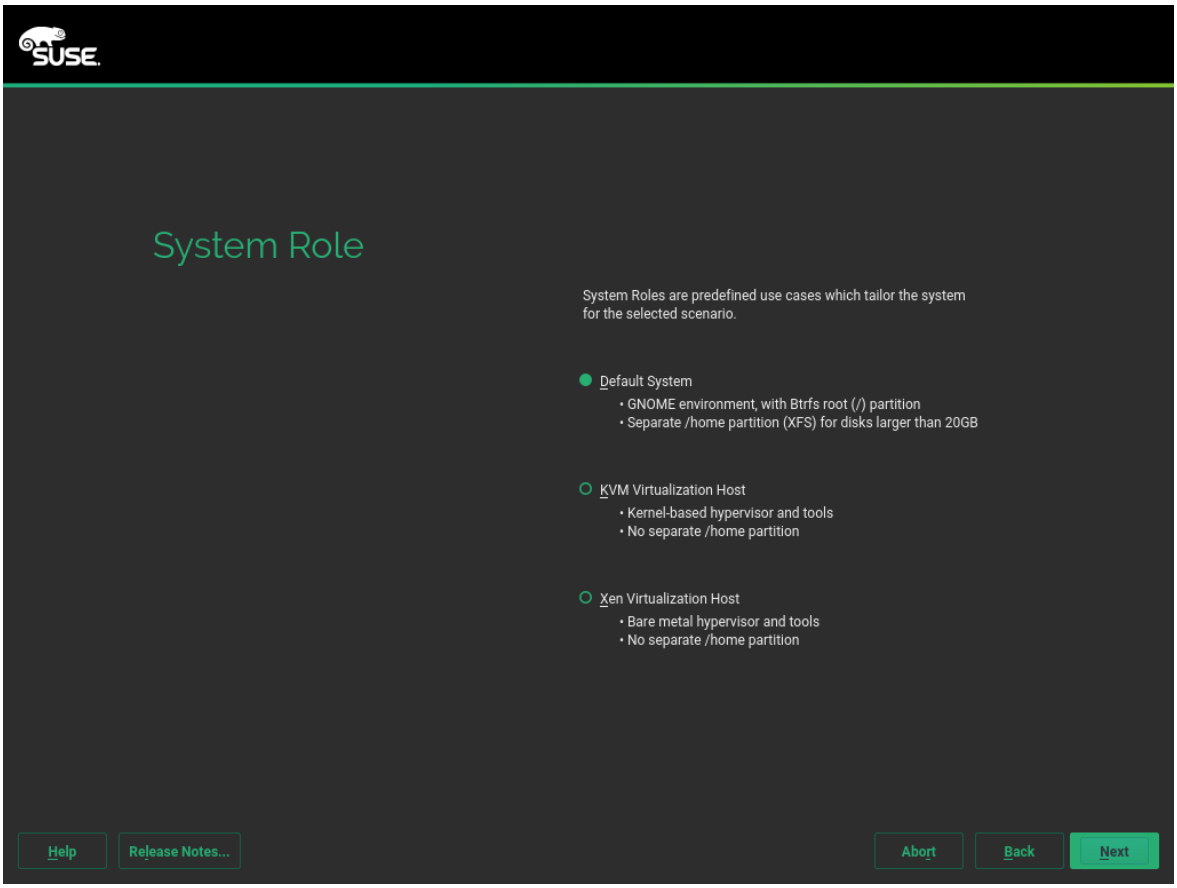
You can also add driver update repositories via the *Add-On Products* dialog. Driver updates for SUSE Linux Enterprise are provided at http://drivers.suse.com/. These drivers have been created via the SUSE SolidDriver Program.

If you want to skip this step, proceed with *Next*. Otherwise activate *I would like to Install an Add-on Product*. Specify a media type, a local path or a network resource hosting the repository and follow the on-screen instructions.

Check *Download Repository Description Files* to download the files describing the repository now. If deactivated, they will be downloaded after the installation has started. Proceed with *Next* and insert a medium if required. Depending on the product's content it may be necessary to accept additional license agreements. Proceed with *Next*. If you have chosen an add-on product requiring a registration key, you will be asked to enter it at the *Extension and Module Registration Codes* page.



7. Choose the *System Role* that meets your requirements best. Select *Default System* for physical machines or virtual guests. For a virtualization host that can run other virtual machines, select *KVM Virtualization Host* or *Xen Virtualization Host*.



8. Review the partition setup proposed by the system. If necessary, change it. You have the following options:

   Edit Proposal Settings

   Lets you change options for the proposed settings, but not the suggested partition layout itself.

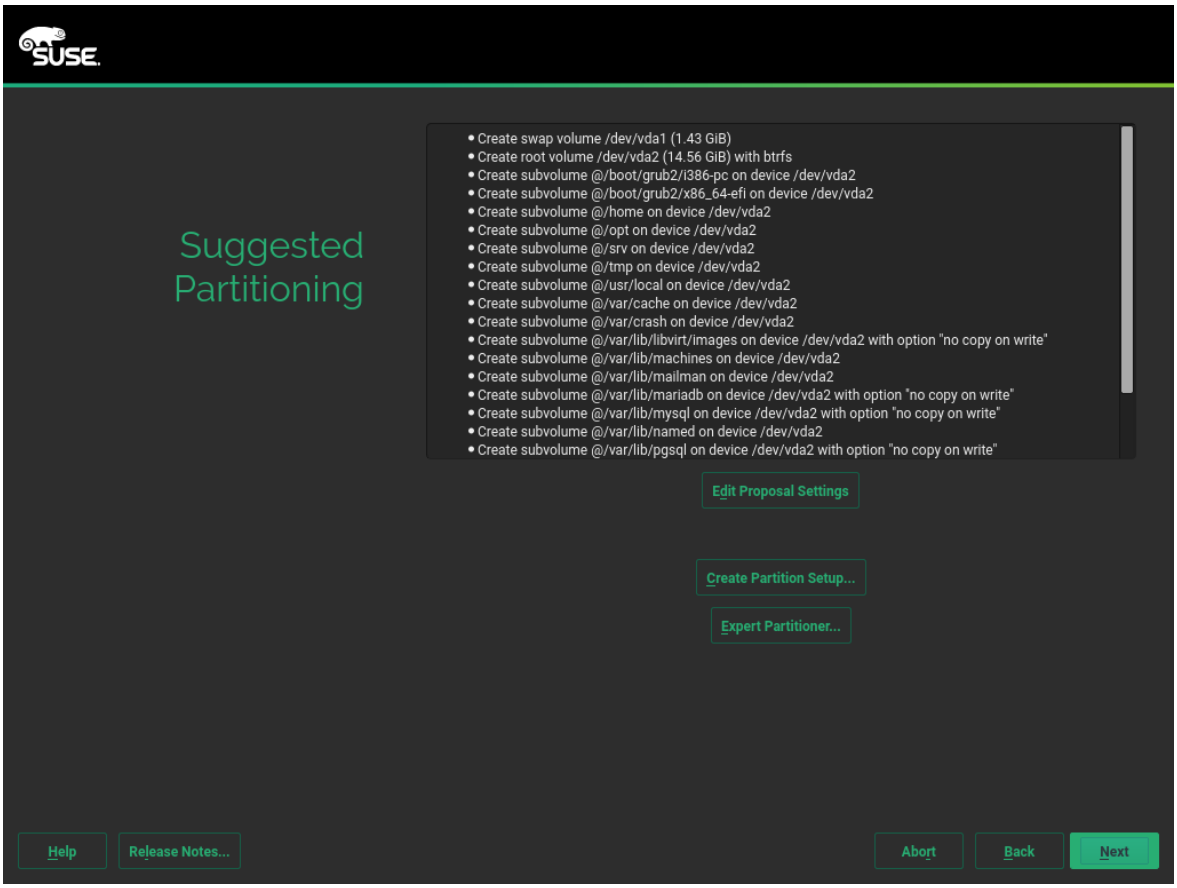
   Create Partition Setup

   Select a disk to which to apply the proposal.

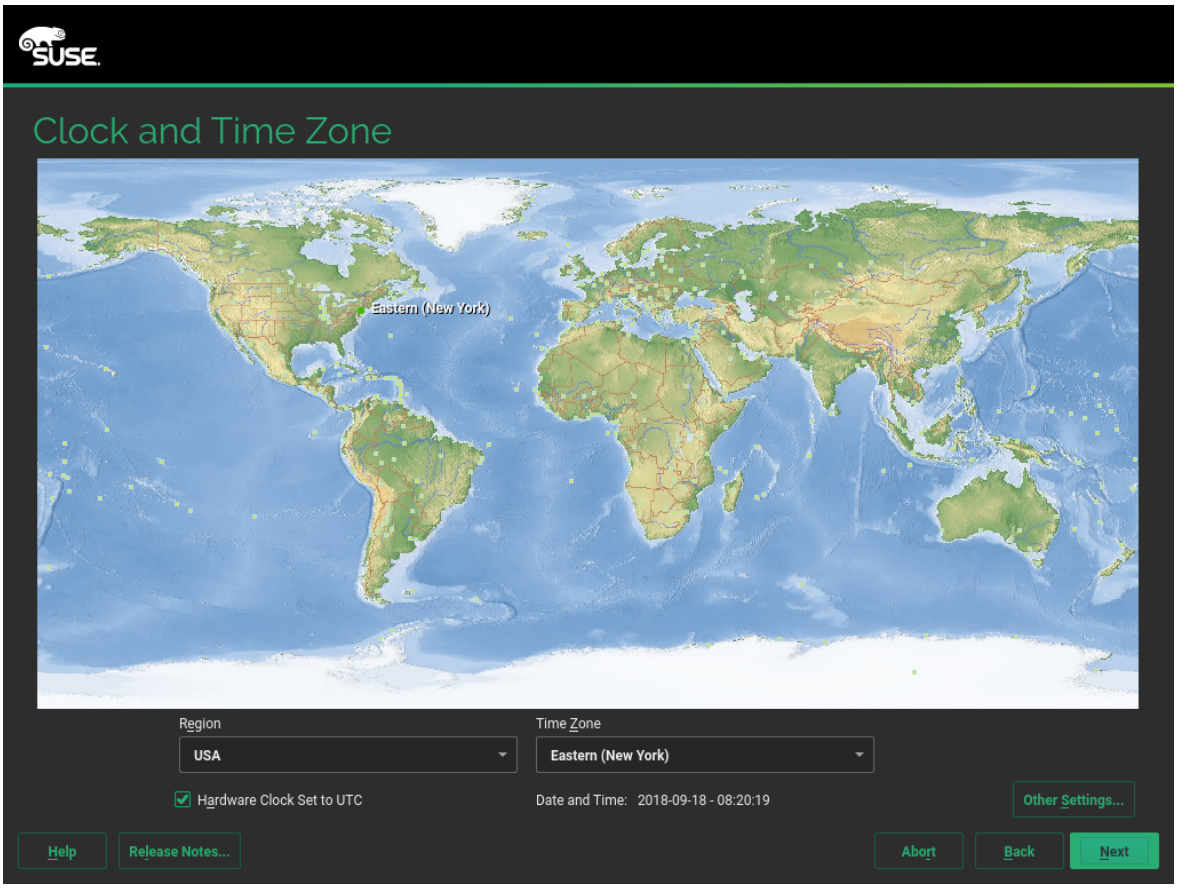
   Expert Partitioner

   Opens the *Expert Partitioner* described in *Book "*Deployment Guide*", Chapter 12 "Advanced Disk Setup", Section 12.1 "Using the YaST Partitioner"*.

   To accept the proposed setup without any changes, choose *Next* to proceed.



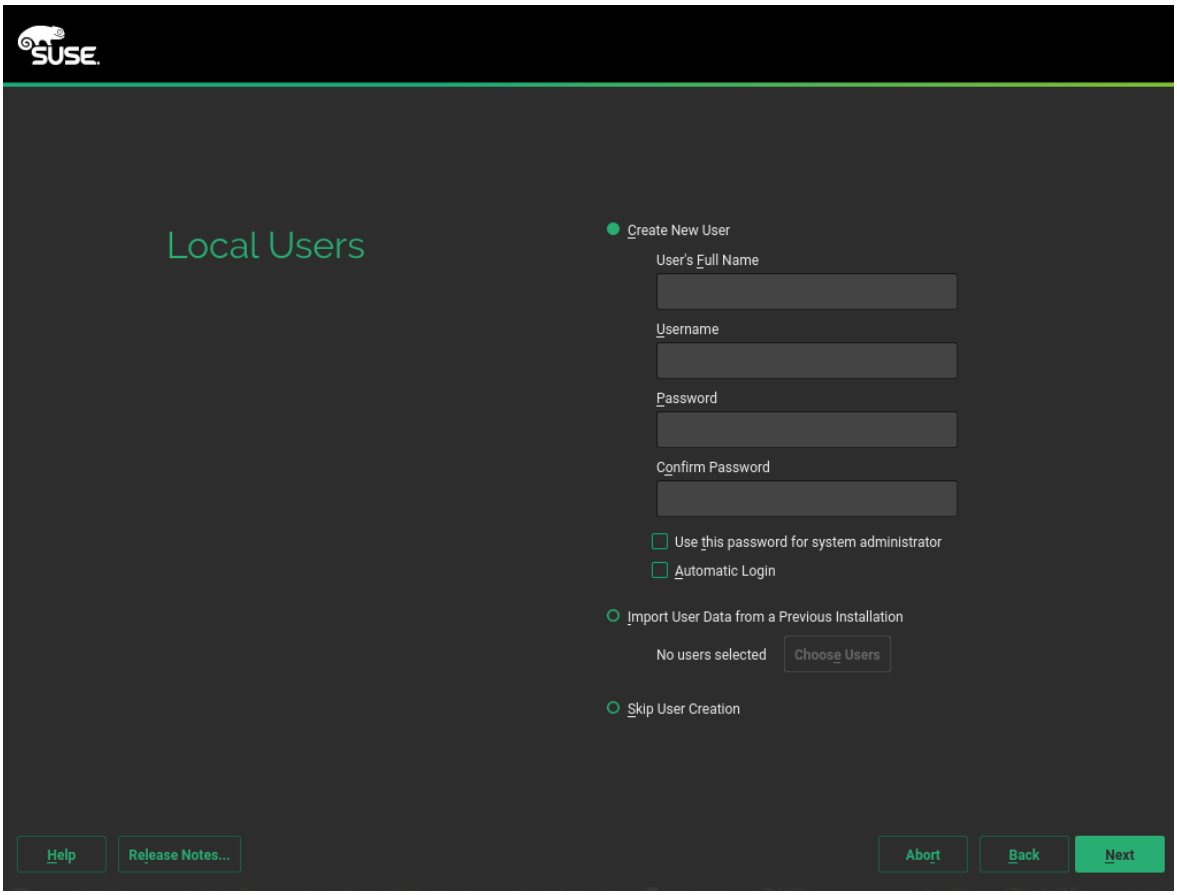
9. Select the clock and time zone to use in your system. To manually adjust the time or to configure an NTP server for time synchronization, choose *Other Settings*. See *Book "*Deployment Guide*", Chapter 6 "Installation with YaST", Section 6.12 "Clock and Time Zone"* for detailed information. Proceed with *Next*.



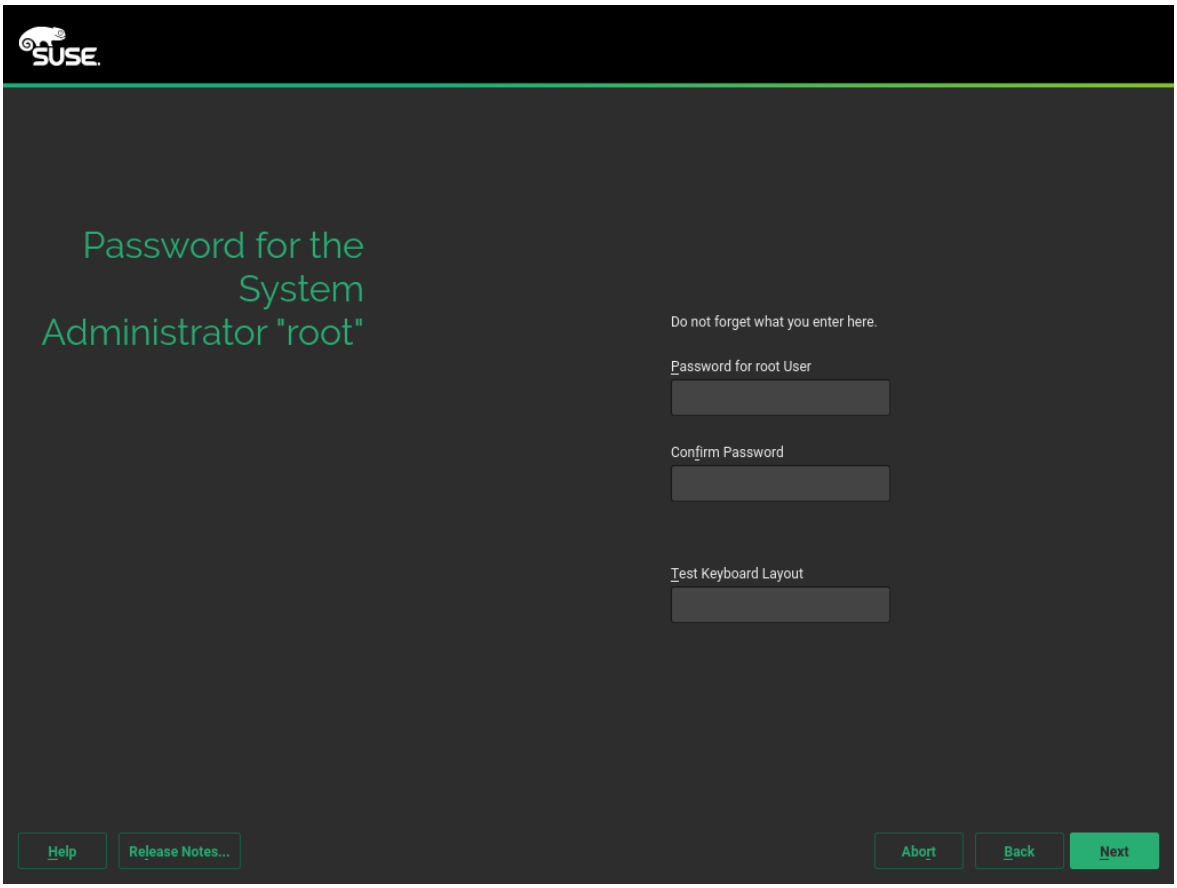
10. To create a local user, type the first and last name in the *User's Full Name* field, the login name in the *Username* field, and the password in the *Password* field.

    The password should be at least eight characters long and should contain both uppercase and lowercase letters and numbers. The maximum length for passwords is 72 characters, and passwords are case-sensitive.

    For security reasons it is also strongly recommended *not* to enable the *Automatic Login*. You should also *not Use this Password for the System Administrator* but rather provide a separate `root` password in the next installation step. Proceed with *Next*.



11. Type a password for the system administrator account (called the `root` user).
You should never forget the `root` password! After you entered it here, the password cannot be retrieved. See *Book "Deployment Guide", Chapter 6 "Installation with YaST", Section 6.14 "Password for the System Administrator* `root`*"* for more information. Proceed with *Next*.



12. Use the *Installation Settings* screen to review and—if necessary—change several proposed installation settings. The current configuration is listed for each setting. To change it, click the headline. Some settings, such as firewall or SSH can directly be changed by clicking the respective links.

Tip: Remote Access

Changes you can make here, can also be made later at any time from the installed system. However, if you need remote access directly after the installation, you should adjust the *Security* settings according to your needs.

Software

The default scope of software includes the base system and X Window with the GNOME desktop. Clicking *Software* opens the *Software Selection and System Tasks* screen, where you can change the software selection by selecting or deselecting patterns. Each pattern contains several software packages needed for specific

functions (for example, Web and LAMP server or a print server). For a more detailed selection based on software packages to install, select *Details* to switch to the YaST *Software Manager*. See *Book "*Deployment Guide*", Chapter 13 "Installing or Removing Software"* for more information.

Booting

This section shows the boot loader configuration. Changing the defaults is only recommended if really needed. Refer to *Book "*Administration Guide*", Chapter 12 "The Boot Loader GRUB 2"* for details.

Security

The *CPU Mitigations* refer to kernel boot command line parameters for software mitigations that have been deployed to prevent CPU side-channel attacks. Click the highlighted entry to choose a different option. For details, see *Book "*Administration Guide*", Chapter 12 "The Boot Loader GRUB 2" CPU Mitigations*.

By default, the Firewall is enabled with the active network interface configured for the external zone. See *Book "*Security Guide*", Chapter 16 "Masquerading and Firewalls", Section 16.4 "SuSEFirewall2"* for configuration details.

The SSH service is disabled by default, its port (22) is closed. Therefore logging in from remote is not possible by default. Click *enable and open* to toggle these settings.

Kdump

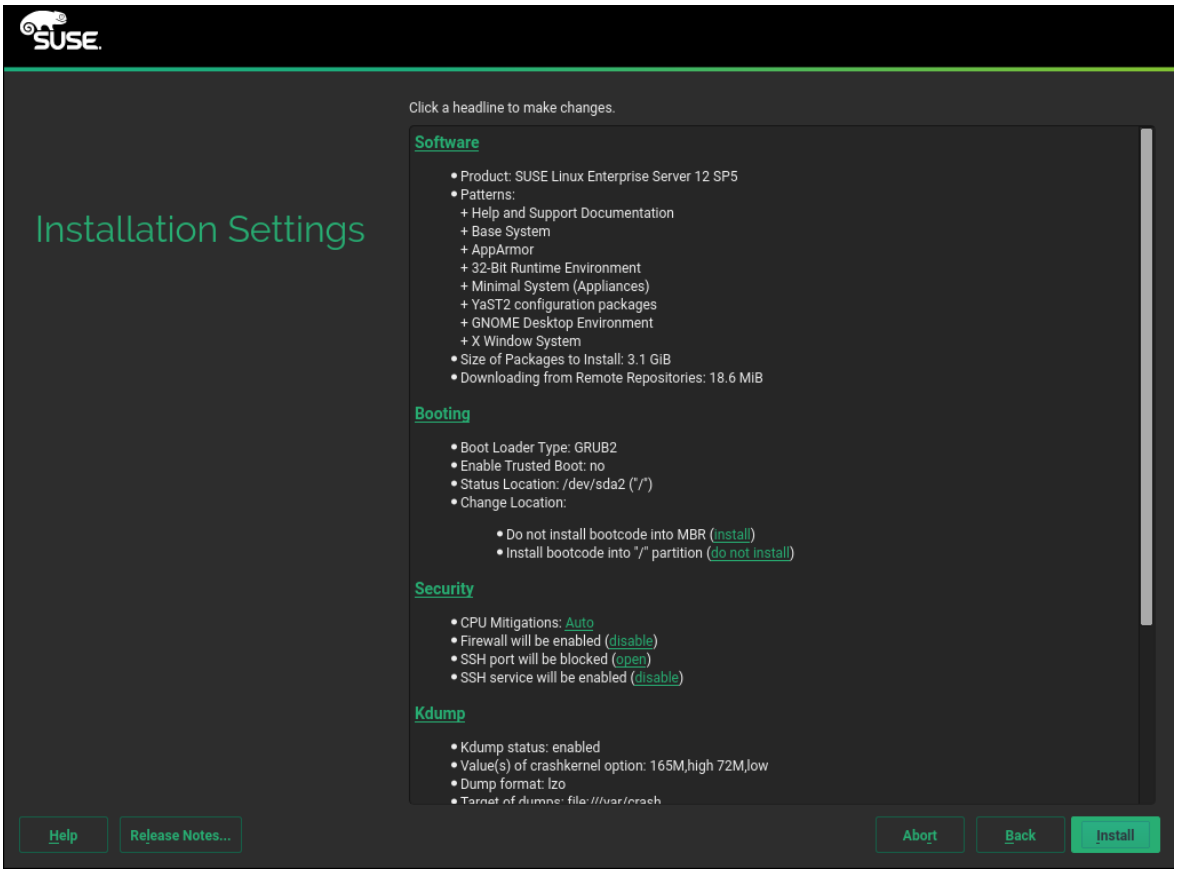
Kdump saves the memory image ("core dump") to the file system in case the kernel crashes. This enables you to find the cause of the crash by debugging the dump file. Kdump is preconfigured and enabled by default. See *Book "*System Analysis and Tuning Guide*", Chapter 17 "Kexec and Kdump", Section 17.7 "Basic Kdump Configuration"* for more information.

Default Systemd Target and Services

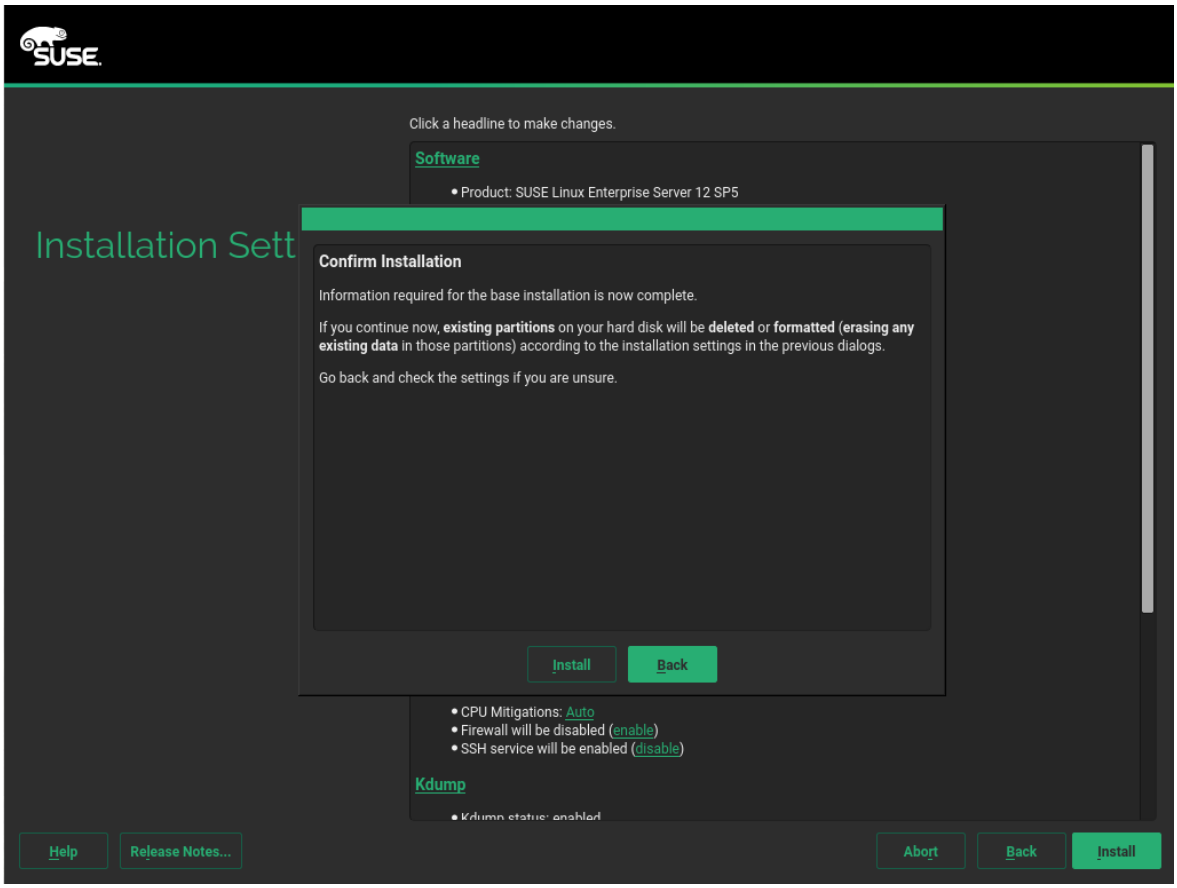
By default, the system boots into the *graphical* target, with network, multiuser and display manager support. Switch to *multi-user* if you do not need to log in via display manager.

System

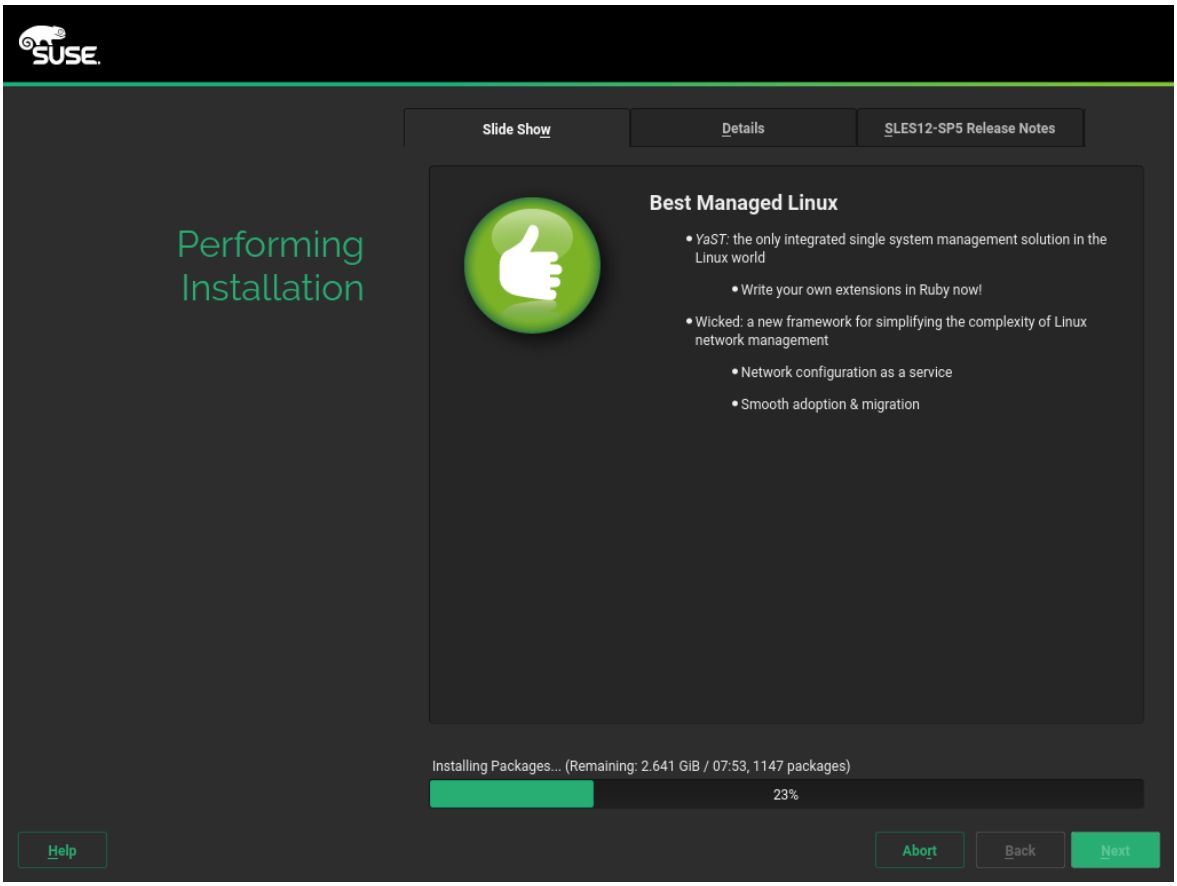
View detailed hardware information by clicking *System*. In the resulting screen you can also change *Kernel Settings*—see *Book "*Deployment Guide*", Chapter 6 "Installation with YaST", Section 6.15.8 "System Information"* for more information.



13. After you have finalized the system configuration on the *Installation Settings* screen, click *Install*. Depending on your software selection you may need to agree to license agreements before the installation confirmation screen pops up. Up to this point no changes have been made to your system. After you click *Install* a second time, the installation process starts.



14. During the installation, the progress is shown in detail on the *Details* tab.



15. After the installation routine has finished, the computer is rebooted into the installed system. Log in and start YaST to fine-tune the system. If you are not using a graphical desktop or are working from remote, refer to *Book "*Administration Guide*", Chapter 5 "YaST in Text Mode"* for information on using YaST from a terminal.

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