


Create a Virtual Machine

This assistant will guide you through creating a new virtual machine (VM). You will be asked for some information about the VM you'd like to create, such as:

- The **type of operating system** that will run in the new VM
- Whether the VM will be **fully virtualized** or **paravirtualized**
- The **location** of the files necessary to install an operating system on the VM, or a **disk** that already has an operating system
- Other characteristics of the VM, such as **memory, processors, and network adapters.**



For the most current information on SUSE VM server technology, see <http://www.suse.com/documentation>

 Cancel Back Forward

Install an Operating System?

If you are creating this VM from scratch, you will need to install an operating system. When migrating a physical machine to a virtual machine, the disk with the existing operating system can often be reused for the VM.


- I need to install an operating system.
- I have a disk or disk image with an installed operating system.

 Cancel Back Forward

Type of Operating System

Please specify the type of operating system that will run within the virtual machine. This defines many defaults, and helps decide how to start paravirtualized operating systems.

- ▶ NetWare
- ▶ Other
- ▶ RedHat
- ▼ SUSE
 - Novell Open Enterprise Server 2 (Linux)
 - Novell Open Enterprise Server 11
 - SUSE (other)
 - SUSE Linux Enterprise Desktop 10
 - SUSE Linux Enterprise Desktop 11
 - SUSE Linux Enterprise Server 8
 - SUSE Linux Enterprise Server 9
 - SUSE Linux Enterprise Server 10
 - SUSE Linux Enterprise Server 11**
 - openSUSE
 - openSUSE 11
 - openSUSE 12

 Cancel Back Forward

Summary

Click any headline to make changes. When the settings are correct, click **OK** to create the VM.

Name of Virtual Machine

Name: sles11

Description:

Hardware

Initial Memory: 512 MB

Maximum Memory: 512 MB

Virtual Processors: 2

Host Devices: None

Peripheral Devices

Graphics Adapter: No Graphics Support

Keymap: en-us

Sound Card: None

Disks

1: 8.0 GB Hard Disk (file:/var/lib/kvm/images/sles11/disk0.raw)

Network Adapters

1: QEMU Virtualized NIC Card; Randomly generated MAC address

Operating System Installation

Operating System: SUSE Linux Enterprise Server 11

Installation Source: ftp://10.120.0.100/install/SLP/SLES-11-SP3-LATEST/s390x/DVD1

Automated Installation:

Additional Arguments:




 Cancel

 Back

 OK

Operating System Installation

Specify the bootable virtual disk (often labeled as Disk 1) or the network installation source URL. Each CD, DVD, or ISO image required for installation must be added as a virtual disk.

- Virtual Disk: 
- Network URL: 
- PXE Boot:

Some operating systems support automating the installation by specifying a URL or file(s). Select a directory to include multiple files.

AutoYaST file: 

Some operating systems accept additional arguments, used to customize the installation or boot process.

Additional Arguments:

Select the behavior when the operating system exits with power off, reboot or crash. Settings take effect after installation is complete.

Power Off:  Reboot:  Crash: 



Disks

| Name | Type | Source | Size (GB) |
|------|-----------|---|-----------|
| 1 | Hard Disk | file:/var/lib/kvm/images/sles11/disk0.raw | 8.0 |



Up



Down



CD-Rom



Harddisk



Edit



Remove



Cancel



Apply

Virtual Disk

Create a virtual disk based on a device (CD or other block device), an existing image file (ISO), or a new file. Specify a device by its device node, such as /dev/cdrom, not its mount point.

Name: 1

Type: Hard Disk

Source: qcow2:/var/lib/kvm/images/sles11/disk0.qcow2

New

Browse

Protocol: qcow2

Size (GB): 8.0

Create Sparse Image File

Read-Only Access

Cache Mode: default

Cancel

OK

Disks

| Name | Type | Source | Size (GB) |
|------|-----------|--|-----------|
| 1 | Hard Disk | qcow2:/var/lib/kvm/images/sles11/disk0.qcow2 | 8.0 |



Up



Down



CD-Rom



Harddisk



Edit



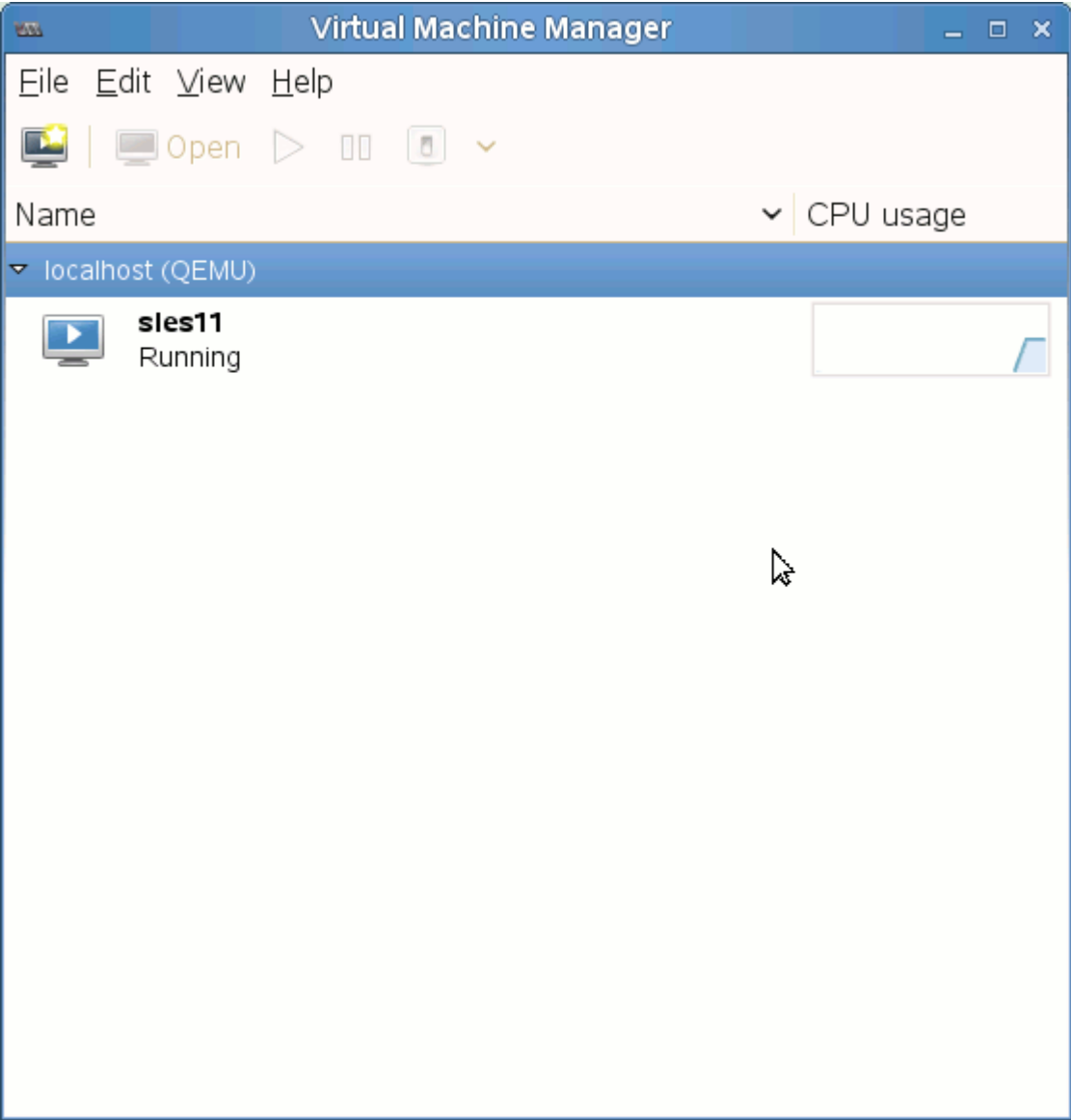
Remove

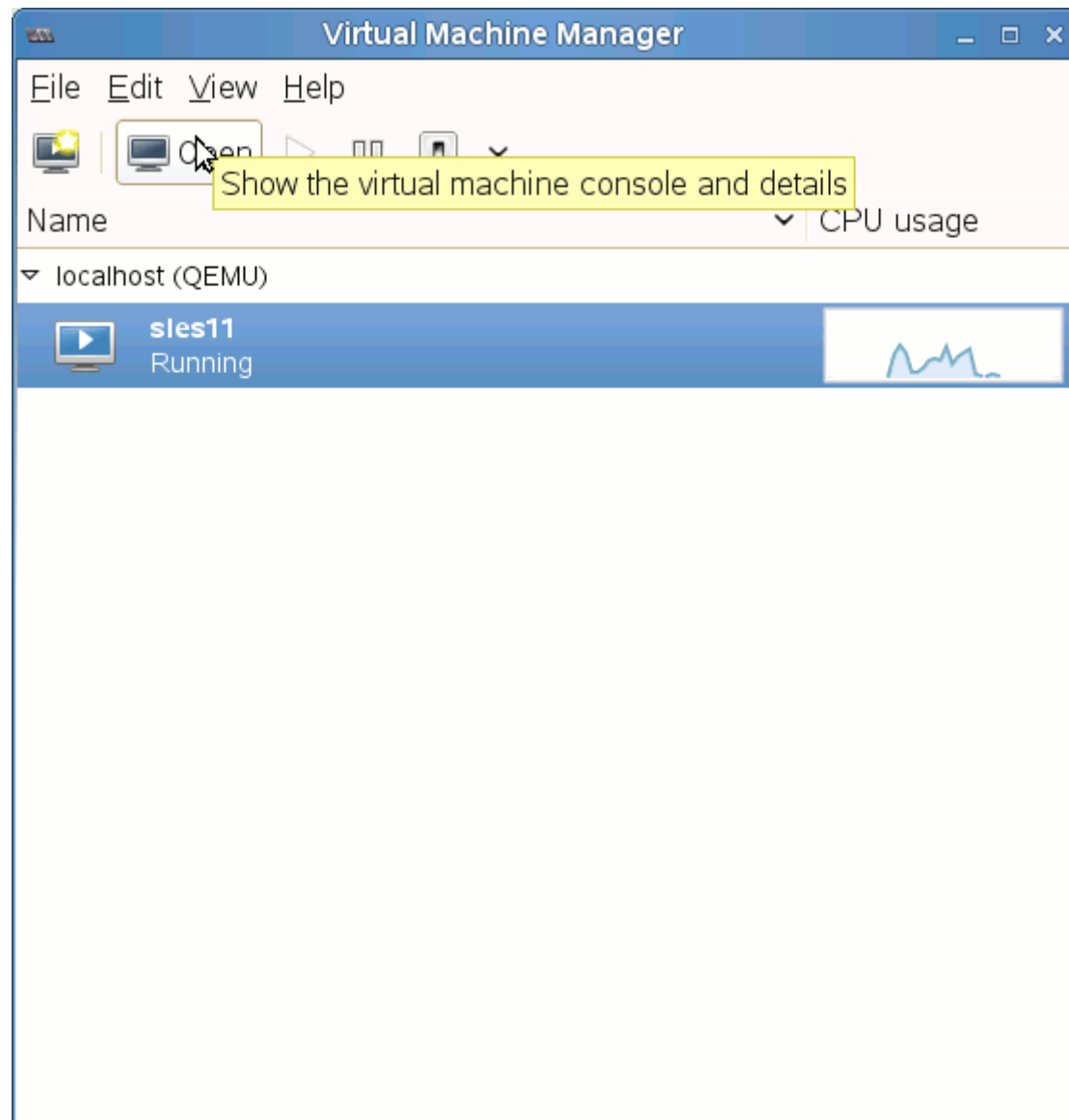


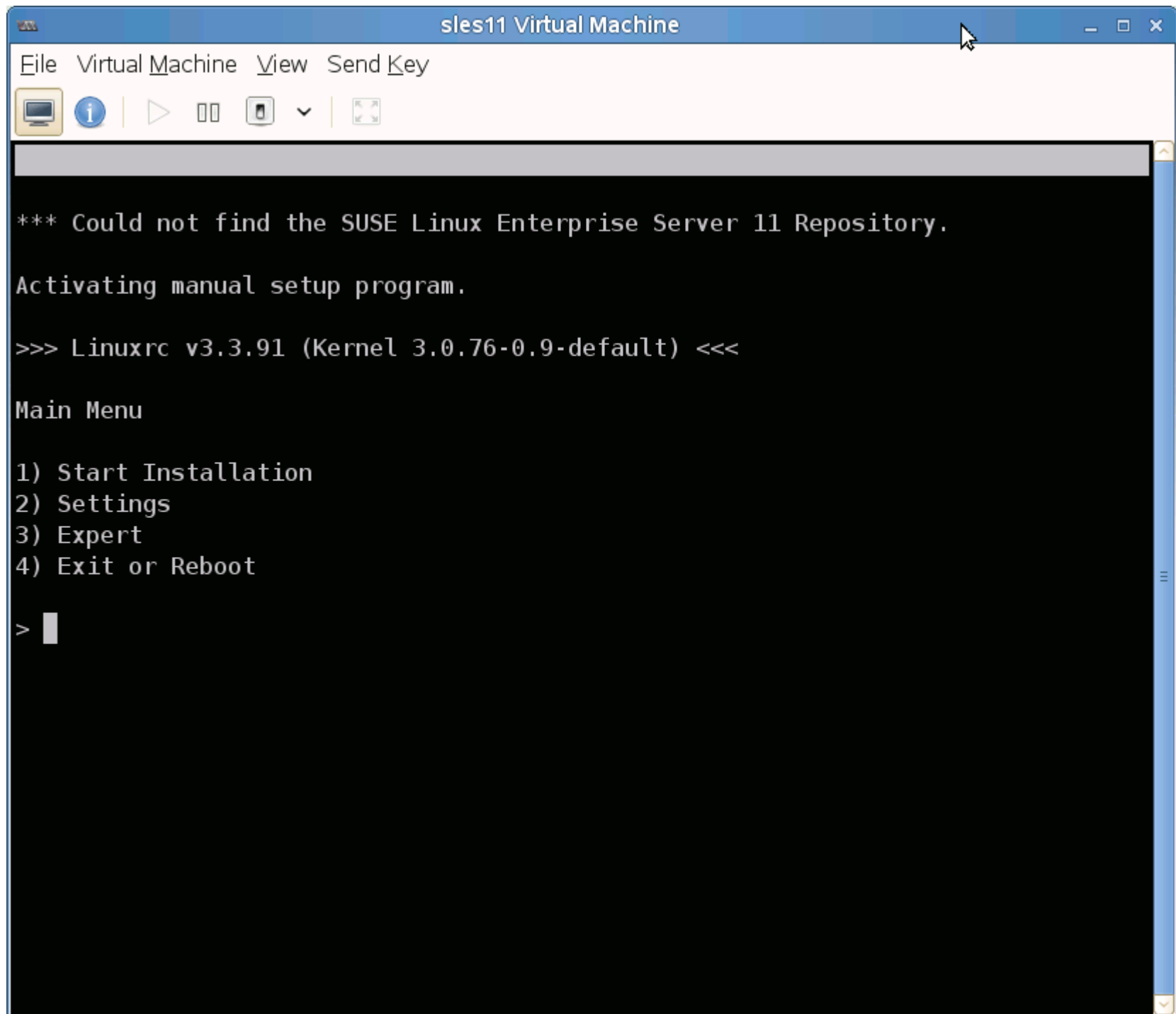
Cancel

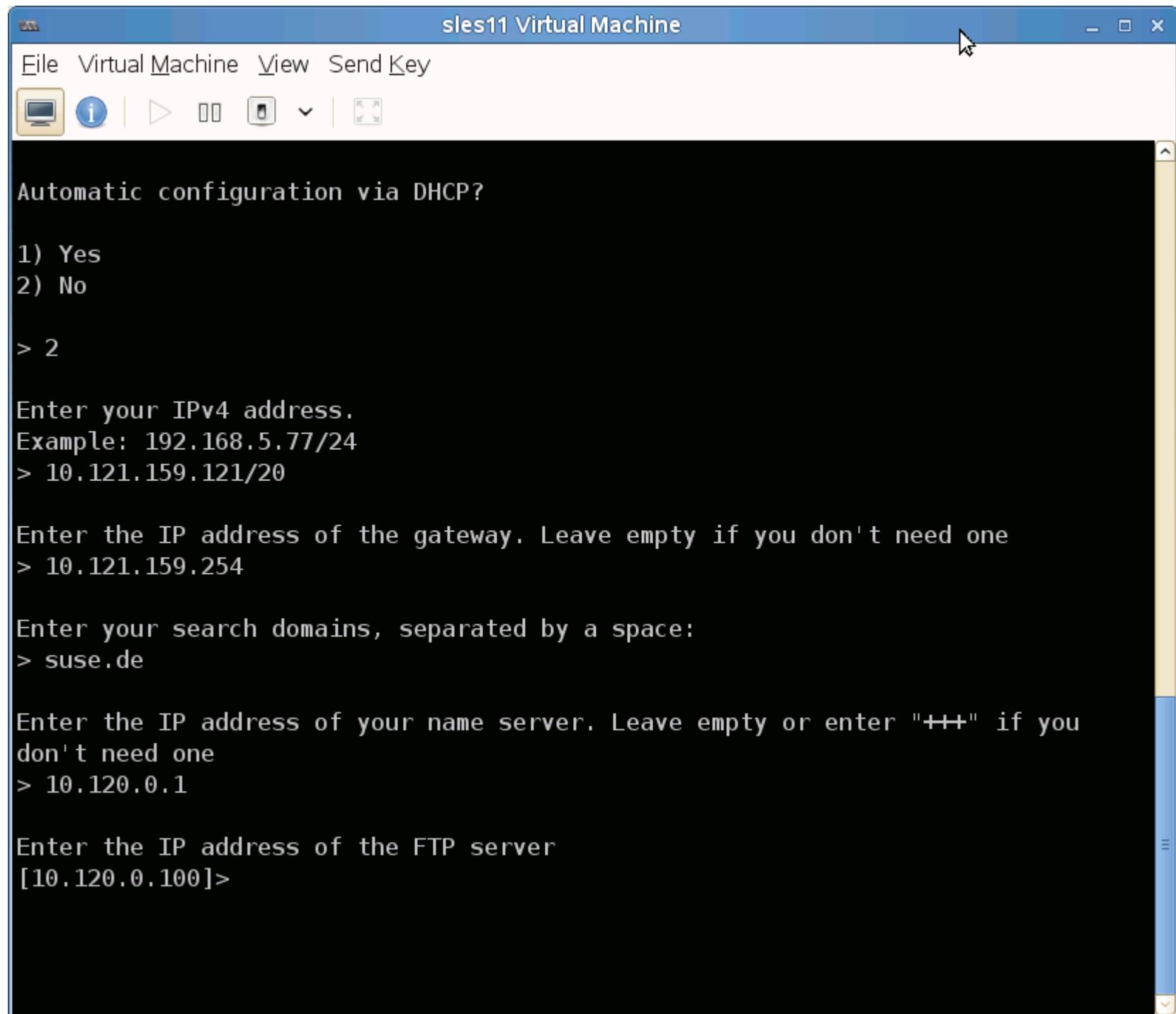


Apply









The image shows a window titled "sles11 Virtual Machine" with a menu bar containing "File", "Virtual Machine", "View", and "Send Key". Below the menu is a toolbar with icons for a monitor, help, play, pause, a device, a dropdown arrow, and a refresh icon. The main area is a black terminal window with white text. The text in the terminal is as follows:

```
Automatic configuration via DHCP?  
  
1) Yes  
2) No  
  
> 2  
  
Enter your IPv4 address.  
Example: 192.168.5.77/24  
> 10.121.159.121/20  
  
Enter the IP address of the gateway. Leave empty if you don't need one  
> 10.121.159.254  
  
Enter your search domains, separated by a space:  
> suse.de  
  
Enter the IP address of your name server. Leave empty or enter "+++" if you  
don't need one  
> 10.120.0.1  
  
Enter the IP address of the FTP server  
[10.120.0.100]>
```

```
sles11 Virtual Machine
File Virtual Machine View Send Key
[Icons: Computer, Info, Play, Pause, Stop, Refresh, Full Screen]

1) Yes
2) No

> 2
Loading Installation System (1/6) (24640 kB) - 100%
squashfs: version 4.0 (2009/01/31) Phillip Lougher
Loading Installation System (2/6) (45440 kB) - 100%
Loading Installation System (3/6) (3677 kB) - 100%
Loading Installation System (4/6) (1728 kB) - 100%
Loading Installation System (5/6) (2752 kB) - 100%
Loading Installation System (6/6) (130 kB) - 100%
Reading Driver Update...

No new Driver Updates found

Select the display type.

1) X11
2) VNC
3) SSH
4) ASCII Console

> █
```



```
sles11 Virtual Machine
File Virtual Machine View Send Key
[Icons: Monitor, Info, Play, Pause, Stop, Refresh, Full Screen]

. 0
. 0
S 0
+. =
.o.+* E
*o=oo
o.==+.
+-- [MD5]-----+
Starting SSH daemon ...

eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP qlen
1000
    link/ether 52:54:00:14:04:46 brd ff:ff:ff:ff:ff:ff
    inet 10.121.159.121/20 brd 10.121.159.255 scope global eth0
    inet6 fe80::5054:ff:fe14:446/64 scope link
        valid_lft forever preferred_lft forever

***  sshd has been started  ***

***  login using 'ssh -X root@10.121.159.121'  ***
***  run 'yast' to start the installation  ***
```

File Edit View Terminal Help

```
mpost@mpost-laptop:~> ssh -l root 10.121.159.121
The authenticity of host '10.121.159.121 (10.121.159.121)' can't be established.
RSA key fingerprint is fb:70:65:74:c1:0d:19:26:0e:d2:59:94:68:48:ba:2d.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.121.159.121' (RSA) to the list of known hosts.
Password:
```

```
SUSE Linux Enterprise Server 11 Installation
```

```
- use 'extend' to load extensions (remove with 'extend -r'); extensions are:
  o bind, gdb
```

```
[11;0]Welcome to the inst-sys on 10.121.159.121 3.0.76-0.9-default s390x
```

```
run yast to start the installation
```

```
inst-sys:~ #
```

```
inst-sys:~ # ls /dev
3270          loop14  loop31  loop49  loop9   md24          null          tty4
block        loop15  loop32  loop5   lp0     md25          oldmem       ttys0
char         loop16  loop33  loop50  md0     md26          port         ttys1
console      loop17  loop34  loop51  md1     md27          ppp          ttys2
core         loop18  loop35  loop52  md10    md28          ptmx         ttys3
cpu_dma_latency loop19  loop36  loop53  md11    md29          pts          ttys4
disk         loop2   loop37  loop54  md12    md3           ram0         ttys5
fd           loop20  loop38  loop55  md13    md30          random       ttys6
full         loop21  loop39  loop56  md14    md31          route        ttys7
fwmonitor    loop22  loop4   loop57  md15    md4           sclp_line0   ttysclp0
kmem         loop23  loop40  loop58  md16    md5           shm          urandom
kmsg         loop24  loop41  loop59  md17    md6           skip         vda
log          loop25  loop42  loop6   md18    md7           snapshot     watchdog
loop0        loop26  loop43  loop60  md19    md8           stderr       X0R
loop1        loop27  loop44  loop61  md2     md9           stdin        zero
loop10       loop28  loop45  loop62  md20    mem           stdout
loop11       loop29  loop46  loop63  md21    net           tty
loop12       loop3   loop47  loop7   md22    network_latency tty1
loop13       loop30  loop48  loop8   md23    network_throughput tty3
inst-sys:~ #
```

File Edit View Terminal Help

```
inst-sys:~ # lsmod | sort
af_packet          35524  0
arc4               12529  0
auth_rpcgss       62691  1 nfs
cdrom             55545  1 sr_mod
crc_t10dif        12563  1 sd_mod
ecb              12844  0
fscache          82670  1 nfs
ipv6             12758  1
ipv6_lib         414178 137 ipv6
lockd            112238 1 nfs
loop            28197  12
Module            Size Used by
nfs              532340 0
nfs_acl         12837  1 nfs
nls_cp437       12924  0
nls_iso8859_1   12742  0
scsi_dh         19086  4 scsi_dh_rdac,scsi_dh_hp_sw,scsi_dh_emc,scsi_dh_alua
scsi_dh_alua    22956  0
scsi_dh_emc     18591  0
scsi_dh_hp_sw   13587  0
scsi_dh_rdac    19046  0
scsi_mod       303847  8 sg,sd_mod,sr_mod,scsi_dh_rdac,scsi_dh_hp_sw,scsi_dh_emc,scsi
_dh_alua,scsi_dh
sd_mod         58847  0
sg            47752  0
squashfs      63750  6
sr_mod        23689  0
sunrpc       324833  4 nfs,nfs_acl,lockd,auth_rpcgss
virtio_balloon 13652  0
virtio_blk     17754  0
virtio_net     24379  0
inst-sys:~ #
```

File Edit View Terminal Help

```
inst-sys:~ # lsblk
```

| NAME | MAJ:MIN | RM | SIZE | RO | MOUNTPOINT |
|-------|---------|----|-------|----|-----------------|
| vda | 253:0 | 0 | 8G | 0 | |
| loop0 | 7:0 | 0 | 24.1M | 1 | /mounts/mp_0000 |
| loop1 | 7:1 | 0 | 44.4M | 1 | /mounts/mp_0001 |
| loop2 | 7:2 | 0 | 4.3M | 1 | /mounts/mp_0002 |
| loop3 | 7:3 | 0 | 1.7M | 1 | /mounts/mp_0003 |
| loop4 | 7:4 | 0 | 2.7M | 1 | /mounts/mp_0004 |
| loop5 | 7:5 | 0 | 192K | 1 | /mounts/mp_0005 |

```
inst-sys:~ #
```

File Edit View Terminal Help

```
inst-sys:~ # cd /sys/bus
inst-sys:/sys/bus # l
total 0
drwxr-xr-x 10 root root 0 Jun 18 20:25 ./
drwxr-xr-x 13 root root 0 Jun 18 20:25 ../
drwxr-xr-x  4 root root 0 Jun 18 20:25 ccw/
drwxr-xr-x  4 root root 0 Jun 18 20:25 css/
drwxr-xr-x  4 root root 0 Jun 18 20:25 event_source/
drwxr-xr-x  5 root root 0 Jun 18 20:25 pci/
drwxr-xr-x  4 root root 0 Jun 18 20:25 platform/
drwxr-xr-x  4 root root 0 Jun 18 20:25 scm/
drwxr-xr-x  4 root root 0 Jun 18 20:25 scsi/
drwxr-xr-x  4 root root 0 Jun 18 20:25 virtio/
inst-sys:/sys/bus # l ccw/
total 0
drwxr-xr-x  4 root root  0 Jun 18 20:25 ./
drwxr-xr-x 10 root root  0 Jun 18 20:25 ../
drwxr-xr-x  2 root root  0 Jun 18 20:25 devices/
drwxr-xr-x  4 root root  0 Jun 18 20:25 drivers/
-rw-r--r--  1 root root 4096 Jun 18 20:31 drivers_autoprobe
--w-----  1 root root 4096 Jun 18 20:31 drivers_probe
--w-----  1 root root 4096 Jun 18 20:31 uevent
inst-sys:/sys/bus # l ccw/drivers
total 0
drwxr-xr-x  4 root root 0 Jun 18 20:25 ./
drwxr-xr-x  4 root root 0 Jun 18 20:25 ../
drwxr-xr-x  2 root root 0 Jun 18 20:25 3270/
drwxr-xr-x  2 root root 0 Jun 18 20:25 virtio_ccw/
inst-sys:/sys/bus # █
```

File Edit View Terminal Help

```
inst-sys:/sys/bus # 1 ccw/devices/
```

```
total 0
```

```
drwxr-xr-x 2 root root 0 Jun 18 20:25 ./
```

```
drwxr-xr-x 4 root root 0 Jun 18 20:25 ../
```

```
lrwxrwxrwx 1 root root 0 Jun 18 20:25 0.0.0000 -> ../../../../devices/css0/0.0.0000/0.0.0000/
```

```
lrwxrwxrwx 1 root root 0 Jun 18 20:25 0.0.0001 -> ../../../../devices/css0/0.0.0001/0.0.0001/
```

```
lrwxrwxrwx 1 root root 0 Jun 18 20:25 0.0.0002 -> ../../../../devices/css0/0.0.0002/0.0.0002/
```

```
inst-sys:/sys/bus #
```

File Edit View Terminal Help

YaST2 - installation @ 10.121.159.121

Welcome

Language

English (US) ↓

Keyboard Layout

English (US) ↓

License Agreement

SUSE(R) Linux Enterprise Server 11 SP3
SUSE Software License Agreement

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F1 Help F9 Abort F10 Next

File Edit View Terminal Help

YaST2 - installation @ 10.121.159.121

Disk Activation

[Configure iSCSI Disks]

[Help]

[Back]

[Abort]

[Next]

F1 Help F8 Back F9 Abort F10 Next

Installation Mode

Select Mode

- New Installation
- Update an Existing System

- Repair Installed System

Include Add-on Products from Separate Media

[Help]

[Back]

[Abort]

[Next]

Clock and Time Zone

- Region
- Africa
 - Argentina
 - Asia
 - Atlantic
 - Australia
 - Brazil
 - Canada
 - Central and South America
 - Etc
 - Europe
 - Global
 - Indian Ocean
 - Mexico
 - Pacific
 - Russia
 - USA**

- Time Zone
- East Indiana (Indianapolis)
 - Hawaii (Honolulu)
 - Indiana (Marengo)
 - Indiana (Petersburg)
 - Indiana Starke (Knox)
 - Indiana (Tell City)
 - Indiana (Vevay)
 - Indiana (Vincennes)
 - Indiana (Winamac)
 - Juneau
 - Kentucky (Louisville)
 - Kentucky (Monticello)
 - Menominee
 - Michigan (Detroit)**
 - Mountain (Denver)
 - Nome
 - North Dakota (Center)
 - North Dakota (New Salem)
 - Pacific (Los Angeles)
 - Puerto Rico
 - Samoa (Pago Pago)
 - Shiprock
 - Virgin Islands (St Thomas)
 - Yakutat

Hardware Clock Set to UTC

Date and Time
2013-06-18 - 16:36:29

[Help]

[Back]

[Abort]

[Next]

Installation Settings

Click a headline to make changes or use the "Change..." menu below.

Overview — Expert

Partitioning

- * Create swap volume /dev/vda1 (745.20 MB)
- * Create root volume /dev/vda2 (7.27 GB) with ext3

Software

- * Product: SUSE Linux Enterprise Server 11 SP3
- * Patterns:
 - + Base System
 - + AppArmor
 - + 32-Bit Runtime Environment
 - + Help and Support Documentation
 - + Minimal System (Appliances)
 - + GNOME Desktop Environment
 - + X Window System
 - + Print Server
- * Size of Packages to Install: 2.5 GB
- * Downloading from Remote Repositories: 857.5 MB

Language

- * Primary Language: English (US)

[Change...↓]

[Help]

[Back]

[Abort]

[Install]

[Dependencies↓] [View↓] [Extras↓]

| Filter | Name | Summary |
|----------|---------------------------|-------------------------|
| Patterns | a+ ConsoleKit | System daemon for track |
| | a+ OpenIPMI | OpenIPMI |
| | a+ PolicyKit | Authorization Toolkit |
| | a+ SuSEfirewall2 | Stateful Packet Filter |
| | a+ acl | Commands for Manipulati |
| | a+ at | A Job Manager |
| | a+ attr | Commands for Manipulati |
| | a+ audit-libs | User Space Tools for Ke |
| | a+ autofs | A Kernel-Based Automoun |
| | a+ autoyast2 | YaST2 - Auto-Installati |
| | a+ autoyast2-installation | YaST2 - Auto-Installati |
| | a+ bc | GNU Command Line Calcul |
| | a+ bind-libs | Shared libraries of BIN |
| | a+ bind-utils | Utilities to query and |
| | a+ binutils | GNU Binutils |

0 of 304 packages installed

Package: ConsoleKit

[Actions↓]

This is the base runtime system. It contains only a minimal multiuser booting system. For running on real hardware, you need to add additional packages and pattern to make this pattern useful on its own.

ConsoleKit - System daemon for tracking users, sessions and seats

Version: 0.2.10-64.65.1
 Size: 326.0 KiB Media No.: 1
 License: GPL v2 or later
 Package Group: System/Daemons
 Source Package: ConsoleKit-0.2.10-64.65.1

[Help↓]

[Cancel] [Accept]

[Dependencies↓] [View↓] [Extras↓]

Filter

Pattern

a+

a+

a+

0 of 30

This is

system

minima

system

hardwa

additi

patter

useful

[Help↓]

Automatic Changes

In addition to your manual selections, the following packages have been changed to resolve dependencies:

| Name | Summary |
|------------------------|--|
| ConsoleKit | System daemon for tracking users, ses |
| DirectFB | Graphics Library for Framebuffer Devi |
| OpenIPMI | OpenIPMI |
| PolicyKit | Authorization Toolkit |
| PolicyKit-doc | Documentation for PolicyKit |
| SuSEfirewall2 | Stateful Packet Filter Using iptables |
| aaa_base | SUSE Linux Base Package |
| acl | Commands for Manipulating POSIX Acces |
| at | A Job Manager |
| attr | Commands for Manipulating Extended At |
| audit | User Space Tools for Kernel Auditing |
| audit-libs | User Space Tools for Kernel Auditing |
| augeas-lenses | Official set of lenses for use by lib |
| autofs | A Kernel-Based Automounter |
| autoyast2 | YaST2 - Auto-Installation |
| autoyast2-installation | YaST2 - Auto-Installation: Installati |
| bash | The GNU Bourne-Again Shell |
| bash-doc | Documentation how to Use the GNU Bour |

[OK]

[Cancel]

Installation Settings

Click a headline to make changes or use the "Change..." menu below.

Overview — Expert

Partitioning

- * Create swap volume /dev/vda1 (745.20 MB)
- * Create root volume /dev/vda2 (7.27 GB) with ext3

Software

- * Product: SUSE Linux Enterprise Server 11 SP3
- * Patterns:
 - + Base System
 - + Help and Support Documentation
 - + Minimal System (Appliances)
- * Size of Packages to Install: 988.6 MB
- * Downloading from Remote Repositories: 375.2 MB

Language

- * Primary Language: English (US)

[Change...↓]

[Help]

[Back]

[Abort]

[Install]

Installation Settings

Click a headline to make changes or use the "Change..." menu below.

Overview—Expert

Partitioning

- * Create swap
- * Create root

Software

- * Product: S
- * Patterns:
 - + Base Sys
 - + Help and
 - + Minimal
- * Size of Pa
- * Downloadin

Language

- * Primary La

Confirm Installation

Information required for the base installation is now complete.

If you continue now, partitions on your hard disk will be modified according to the installation settings in the previous dialogs.

Go back and check the settings if you are unsure.

[Install] [Back]

[Change...↓]

[Help]

[Back]

[Abort]

[Install]

Perform Installation

| Media | Size | Packages | Time |
|--|------------------|------------|------|
| Total | 985.57 MB | 518 | |
| SUSE-Linux-Enterprise-Server-11-SP3 11.3.3-1.138 | | | |
| Medium 1 | 985.57 MB | 518 | |

Actions performed:

- Downloading branding-SLES (download size 85.00 kB)
- Installing branding-SLES-11-3.20.30.noarch.rpm (installed size 2.00 kB)
- Downloading brocade-firmware (download size 928.00 kB)
- Installing brocade-firmware-3.1.2.1-0.11.4.noarch.rpm (installed size 3.01 MB)
- Downloading desktop-translations (download size 2.22 MB)

Downloading desktop-translations (download size 2.22 MB)
65%

Installing Packages... (Remaining: 988.58 MB)
29%

[Help] [Back] [Abort] [Next]

Finishing Basic Installation

- x Copying files to installed system...
- x Saving configuration...
- x Installing boot manager...
- x Saving installation settings...
- x Preparing system for initial boot...

Your system will now shut down.
After shutdown, reload the system
with an IPL from the device
that contains /bootThen reconnect and run the following:
/usr/lib/YaST2/startup/YaST2.ssh

For details, read the related chapter
in the documentation.

8

[OK] [stop]

Finished.

100%

[Help]

[Back]

[Abort]

[Next]

```
sles11 Virtual Machine
File Virtual Machine View Send Key
[Icons]
Jun 18 16:44:49 linux SuSEfirewall2: SuSEfirewall2 not active
Jun 18 16:44:49 linux SuSEfirewall2: SuSEfirewall2 not active
Waiting for mandatory devices: eth0
29
eth0      name: Ethernet Card 0 (virtio0)
eth0      IP address: 10.121.159.121/20
eth0      is up
Setting up service (localfs) network . . . . .
Starting SSH daemon
*** sshd has been started ***
you can login now and proceed with the installation
run the command '/usr/lib/YaST2/startup/YaST2.ssh'
active interfaces:
eth0      Link encap:Ethernet  HWaddr 52:54:00:14:04:46
          inet addr:10.121.159.121  Bcast:10.121.159.255  Mask:255.255.240.0
--
lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
```

Network Configuration

- () Skip Configuration
- (x) Use Following Configuration

Firewall

- * Firewall is enabled (disable)
- * SSH port is open (close)

Network Interfaces

- * Ethernet Card 0 (virtio0)
Configured with address 10.121.159.121 (linux-4byc.suse.de)

VNC Remote Administration

- * Remote administration is disabled.

Proxy

- * Proxy is disabled.

[Change...↓]

[Help]

[Back]

[Abort]

[Next]

File Edit View Terminal Help

```
linux-4byc:~ # df -h
```

```
Filesystem      Size  Used Avail Use% Mounted on
/dev/vda2       7.2G  1.3G  5.6G  19% /
udev            247M   56K  247M   1% /dev
tmpfs           247M     0  247M   0% /dev/shm
```

```
linux-4byc:~ # ifconfig
```

```
eth0      Link encap:Ethernet  HWaddr 52:54:00:14:04:46
          inet addr:10.121.159.121  Bcast:10.121.159.255  Mask:255.255.240.0
          inet6 addr: fe80::5054:ff:fe14:446/64  Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3313 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2474 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:2362518 (2.2 Mb)  TX bytes:574814 (561.3 Kb)
```

```
lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128  Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:2 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:100 (100.0 b)  TX bytes:100 (100.0 b)
```

```
linux-4byc:~ # lscss
```

```
Device      Subchan.  DevType CU Type Use  PIM PAM POM  CHPIDs
-----
0.0.0000 0.0.0000  0000/00 3832/02 yes  80  80  ff  00000000 00000000
0.0.0001 0.0.0001  0000/00 3832/01 yes  80  80  ff  00000000 00000000
0.0.0002 0.0.0002  0000/00 3832/05 yes  80  80  ff  00000000 00000000
```

```
linux-4byc:~ # lschp
```

```
CHPID Vary Cfg. Type Cmg Shared
=====
0.00 1 - 32 - 0
```

```
linux-4byc:~ #
```

File Edit View Terminal Help

```
linux-4byc:~ # uname -a
Linux linux-4byc 3.0.76-0.9-default #1 SMP Fri May 31 09:17:47 UTC 2013 (82ad5ef) s390x s390
x s390x GNU/Linux
linux-4byc:~ # ll /boot/
total 21008
drwxr-xr-x  3 root root    4096 Jun 18 16:51 ./
drwxr-xr-x 22 root root    4096 Jun 18 16:39 ../
-rw-r--r--  1 root root   1236 May 11 07:16 boot.readme
-rw-r--r--  1 root root  48314 May 31 08:42 config-3.0.76-0.9-default
lrwxrwxrwx  1 root root     24 Jun 18 16:43 image -> image-3.0.76-0.9-default*
-rwxr-xr-x  1 root root 9072128 May 31 10:24 image-3.0.76-0.9-default*
lrwxrwxrwx  1 root root     25 Jun 18 16:43 initrd -> initrd-3.0.76-0.9-default
-rw-r--r--  1 root root 7247264 Jun 18 16:44 initrd-3.0.76-0.9-default
-rw-r--r--  1 root root  107655 May 31 10:41 symvers-3.0.76-0.9-default.gz
-rw-r--r--  1 root root 1514627 May 31 10:24 System.map-3.0.76-0.9-default
-rw-r--r--  1 root root 3456906 May 31 10:37 vmlinux-3.0.76-0.9-default.gz
drwxr-xr-x  2 root root    4096 Jun 18 16:44 zipl/
linux-4byc:~ # █
```