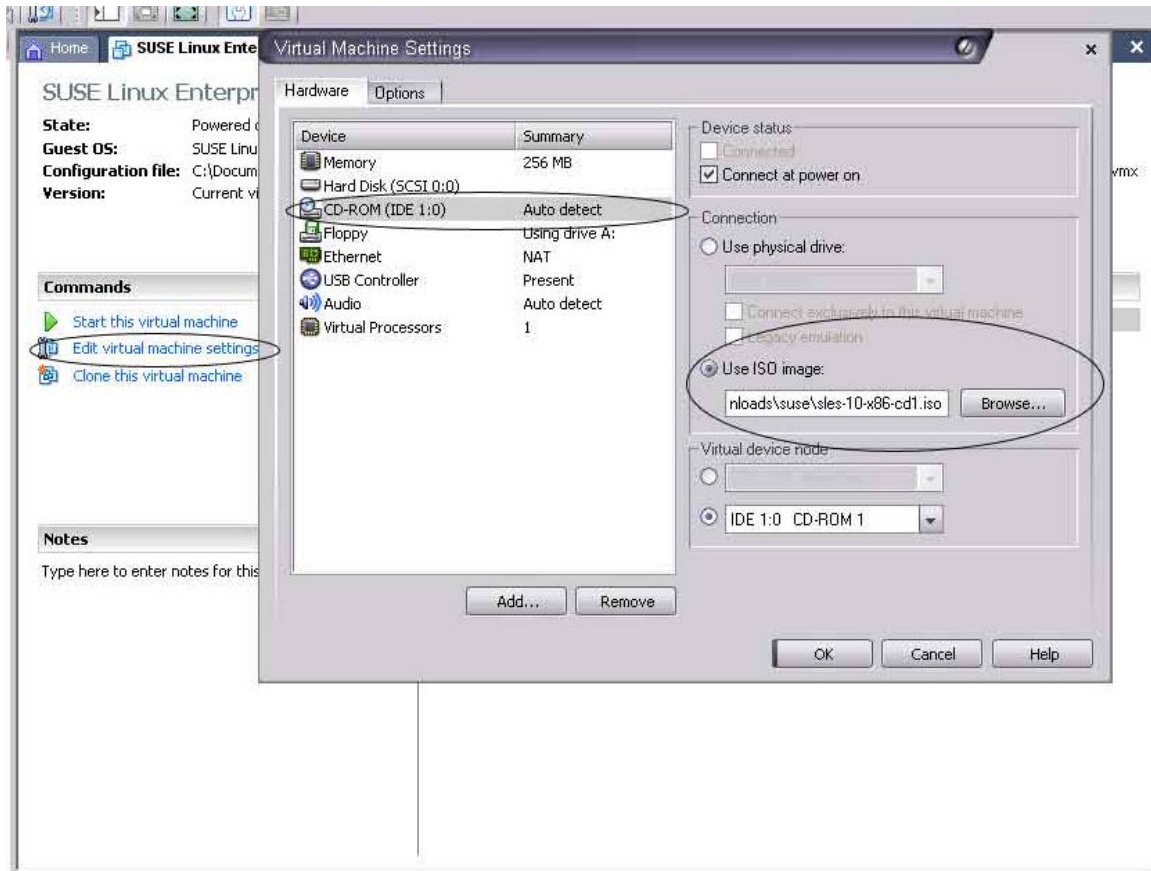


Hi, my name is Corey and welcome to my SuSE 10.1 & VHCS2 installation guide! This guide will help you get SuSE and VHCS2 installed within an hour (on a decent computer). There are also some instructions for those of you using VMware inside of a Windows host. If you're not using VMware, you will still be able to follow these instructions and setup a working web server.

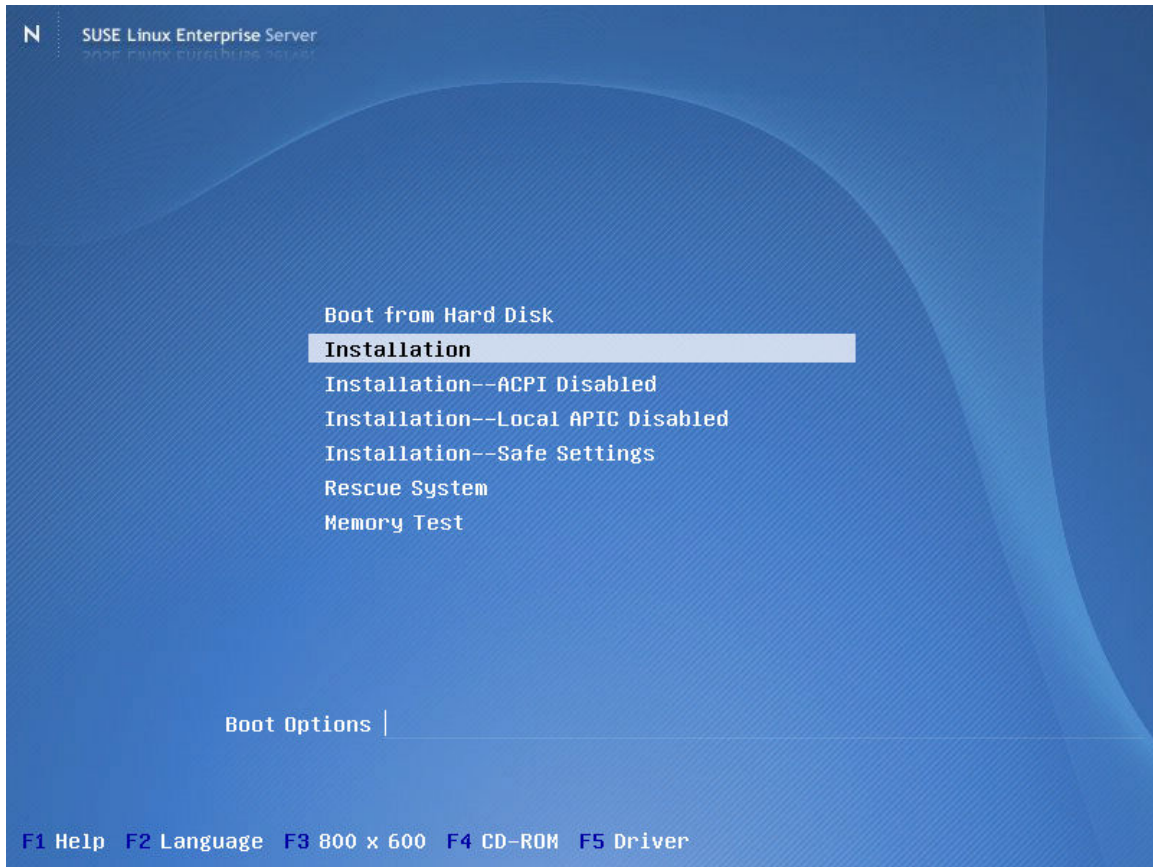
VMware specific.

- Make a new virtual machine in VMware.
- Select "Typical installation" and click next.
- Select the radio button named "Linux", then select "SuSE Linux Enterprise Server" from the dropdown list, click next. If you don't see SuSE anywhere, select "Other Linux 2.6.x kernel."
- Pick a name and a directory where you want the virtual hard drive to be stored (ex: C:\suse), then click next.
- Select "Use Network address translation (NAT)" and click next
- Specify the size of the virtual hard drive to be created, and if you have enough room on your hard drive, check the box "allocate all disk space now." Click finish.

- Click “edit virtual machine settings”
- Select CD-ROM on the list. Under the Connection group on the right, select the radio button “Use ISO image.” Search for CD 1 of SUSE (C:\download\sles-10-x86-cd1.iso or something similar)
- Click ok and the virtual machine settings window will close.



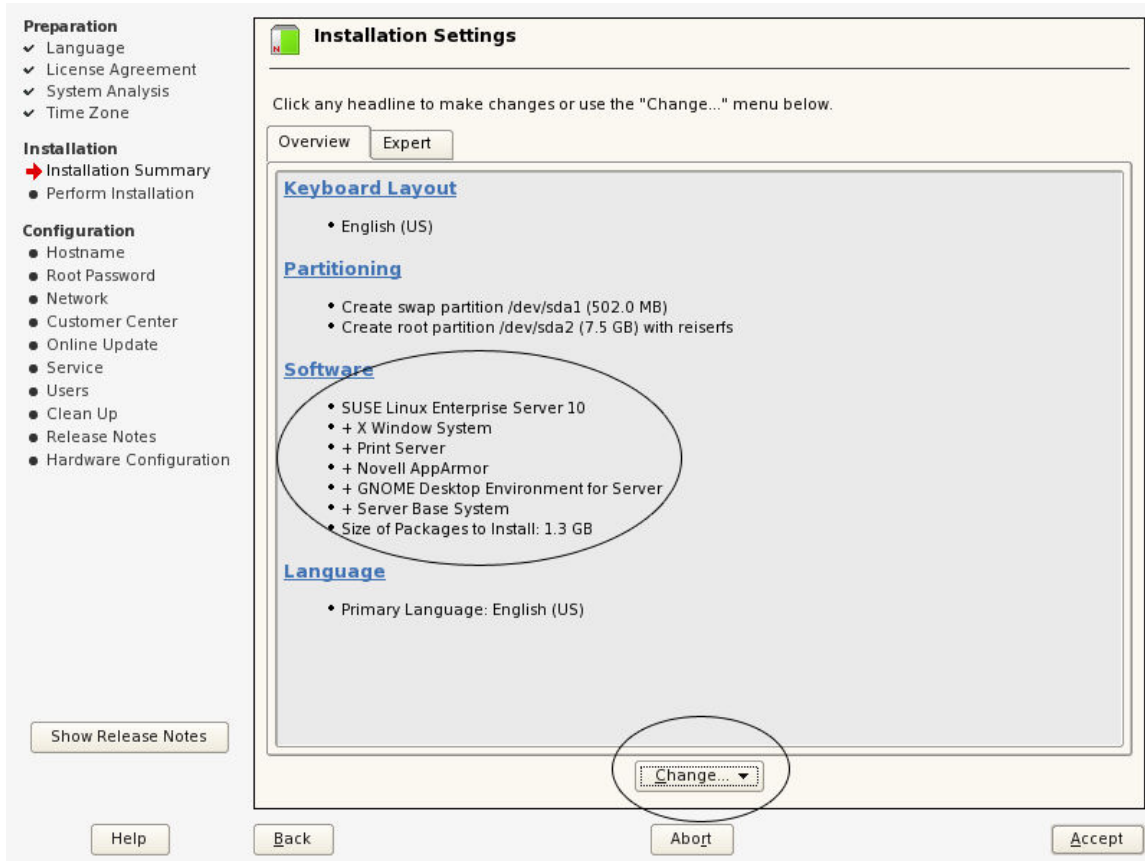
Insert CD #1 and turn on the computer (or virtual machine). Select Install from the list of options.



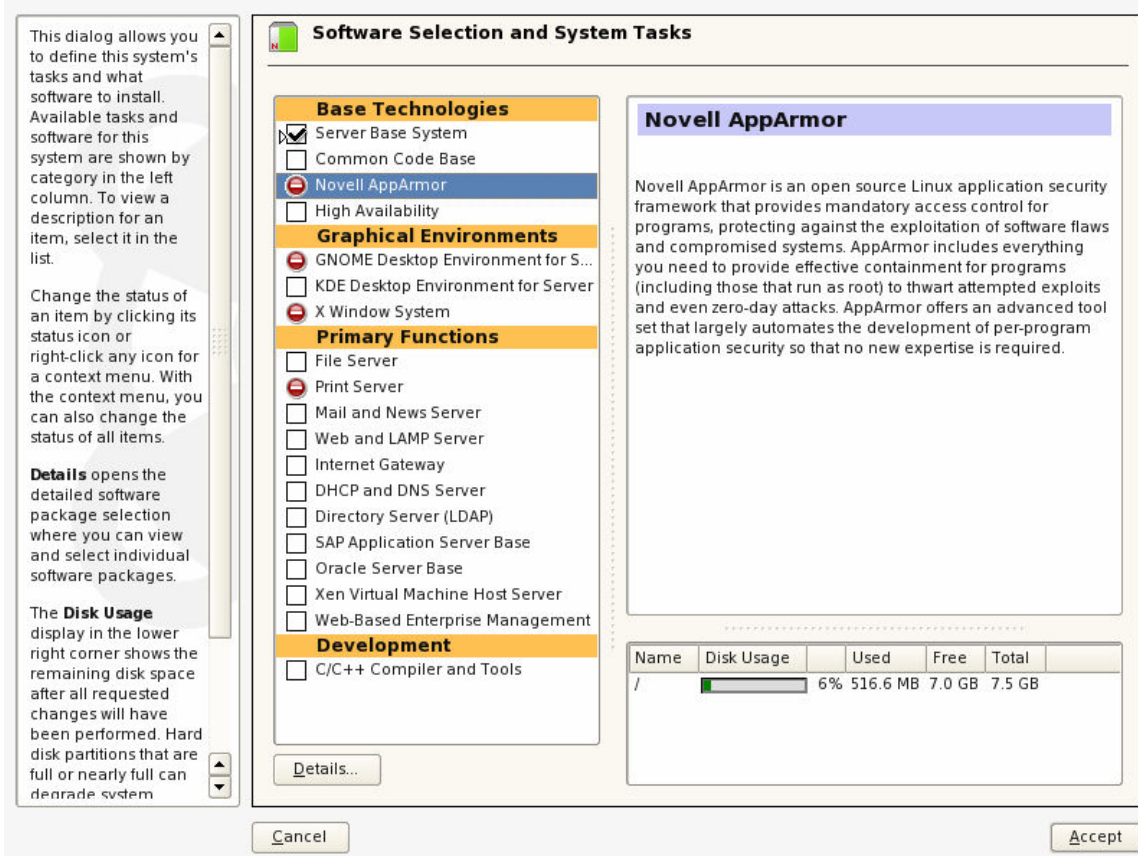
SuSE will now load the installation modules. This may take a few minutes.

Select your language, agree to the SuSE license, select “New Installation”, and set the time zone.

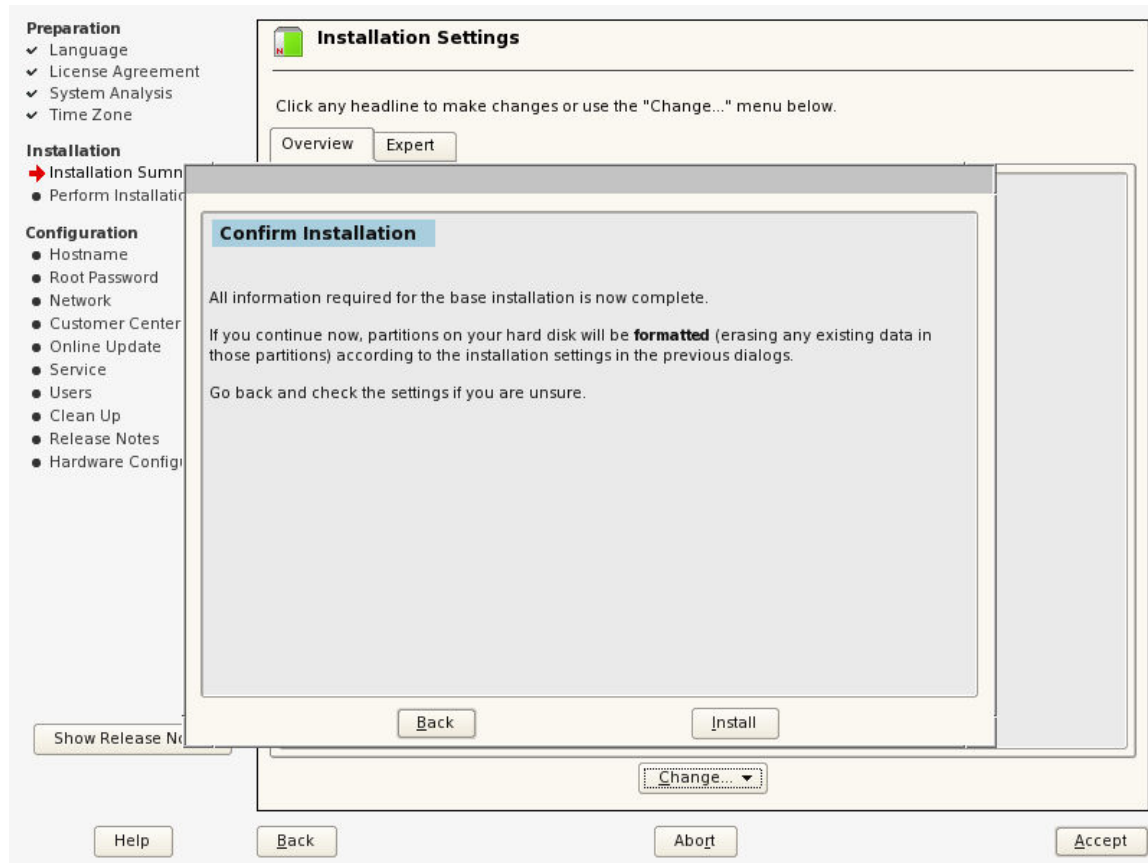
SuSE Install will now prepare to install everything on your computer, including several software packages. Since we're going to be running a web server, we won't need a graphical interface. Click on the "Change" button at the bottom, and select "Software" from the list.



The only thing we need to install is the “Server Base System.” Sure, Novell AppArmor sounds good in theory, but it will cause problems with some services later on that we’d much rather avoid. Accept the changes.

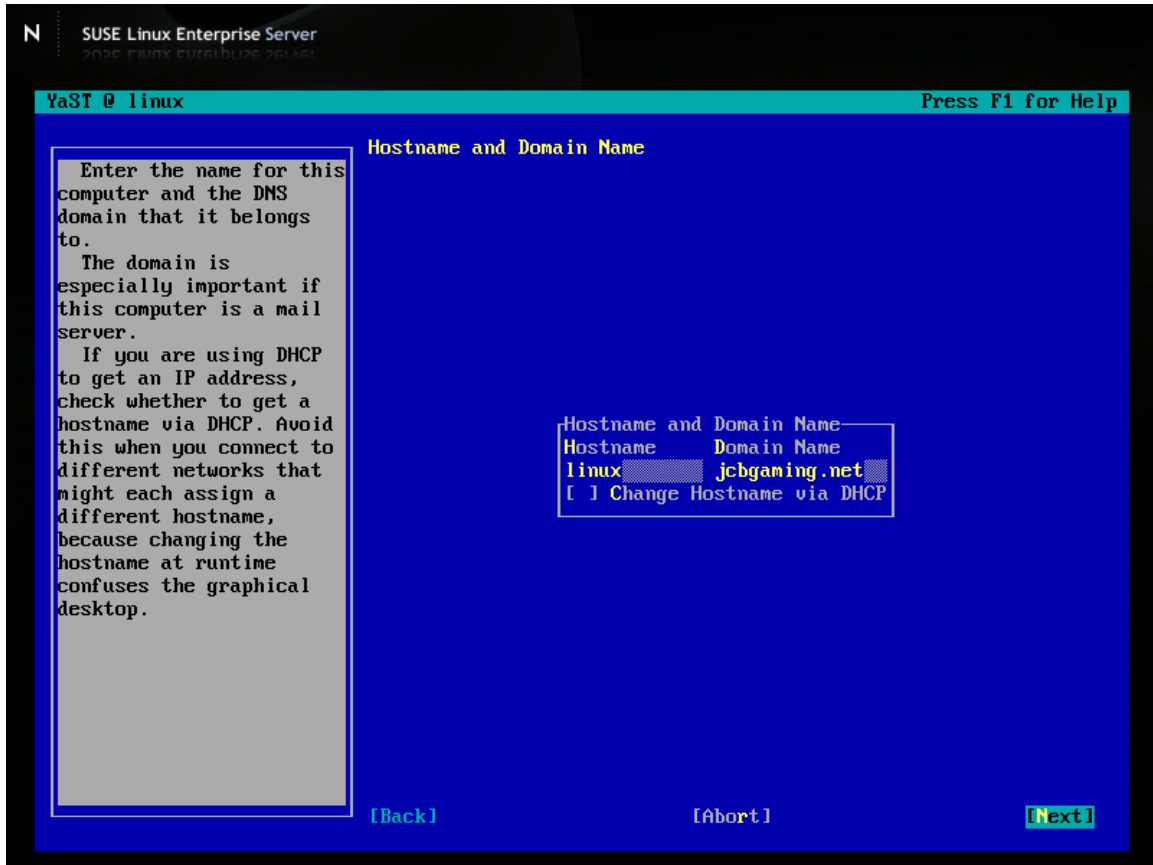


A warning saying that your disk will be formatted will pop up. If you're running in VMware, you needn't worry about losing information on your hard drive because there is a virtual hard drive, a hard drive in a hard drive, and the virtual one is the only drive that will be formatted.

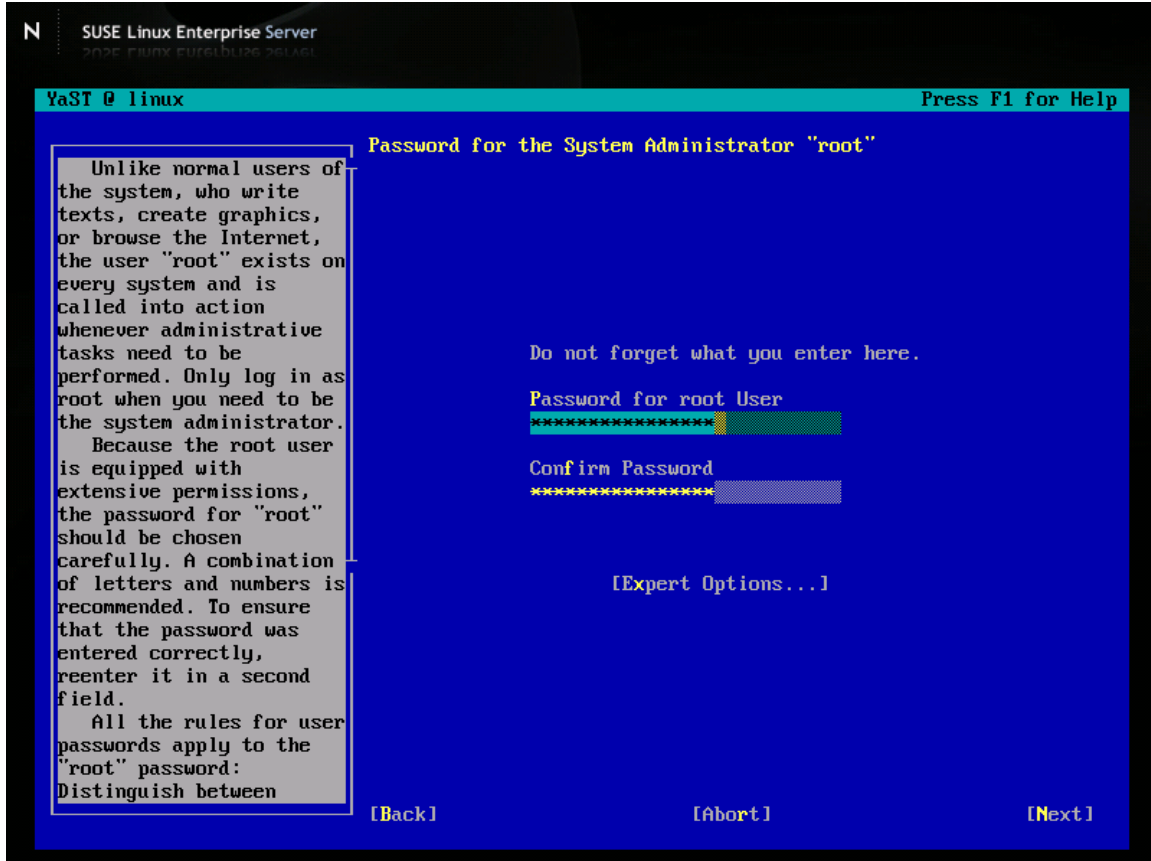


SuSE will now create the partitions on your drive and begin the installation process. After you insert CD2 we will start configuring the server.

The first two fields we need to configure are the hostname and domain. You can set the hostname to pretty much anything, for this demonstration we will use “linux” as our hostname. If you have a domain name, or plan to have one, fill in the “Domain. Name” field, otherwise make one up. Since we are setting up a server and things should remain static (not changing), we don’t want to “Change Hostname via DHCP,” so uncheck that box.



Select a password for your root user. Don't lose it! You'll need it!





Now disable the firewall by pressing tab until you are at the list of network options. Press the arrow keys until you get to firewall and press enter. This will disable the firewall.

Put the network settings into effect by pressing Next.  
Change the values by clicking on the respective headline or by using the Change... menu.

### Network Configuration

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

#### Network Mode

- \* Traditional Method without the NetworkManager Applet (Enable NetworkManager)

#### Firewall

Firewall is **enabled**  
SSH port is **blocked**

#### Network Interfaces

- \* AMD PCnet - Fast 79C971  
Configured with DHCP

#### DSL Connections

- \* Not detected.

#### ISDN Adapters

- \* Not detected.

#### Modems

- \* Not detected.

#### UNC Remote Administration

- \* Remote administration is disabled.

#### Proxy

- \* Proxy is disabled.

[Change...↓]

[Abort]

[Back]

[Next]

Put the network settings into effect by pressing Next.  
Change the values by clicking on the respective headline or by using the Change... menu.

### Network Configuration

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

#### Network Mode

- \* Traditional Method without the NetworkManager Applet (Enable NetworkManager)

#### Firewall

Firewall is **disabled**

#### Network Interfaces

- \* AMD PCnet - Fast 79C971  
Configured with DHCP

#### DSL Connections

- \* Not detected.

#### ISDN Adapters

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#### Modems

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#### UNC Remote Administration

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- \* Proxy is disabled.

[Change...↓]

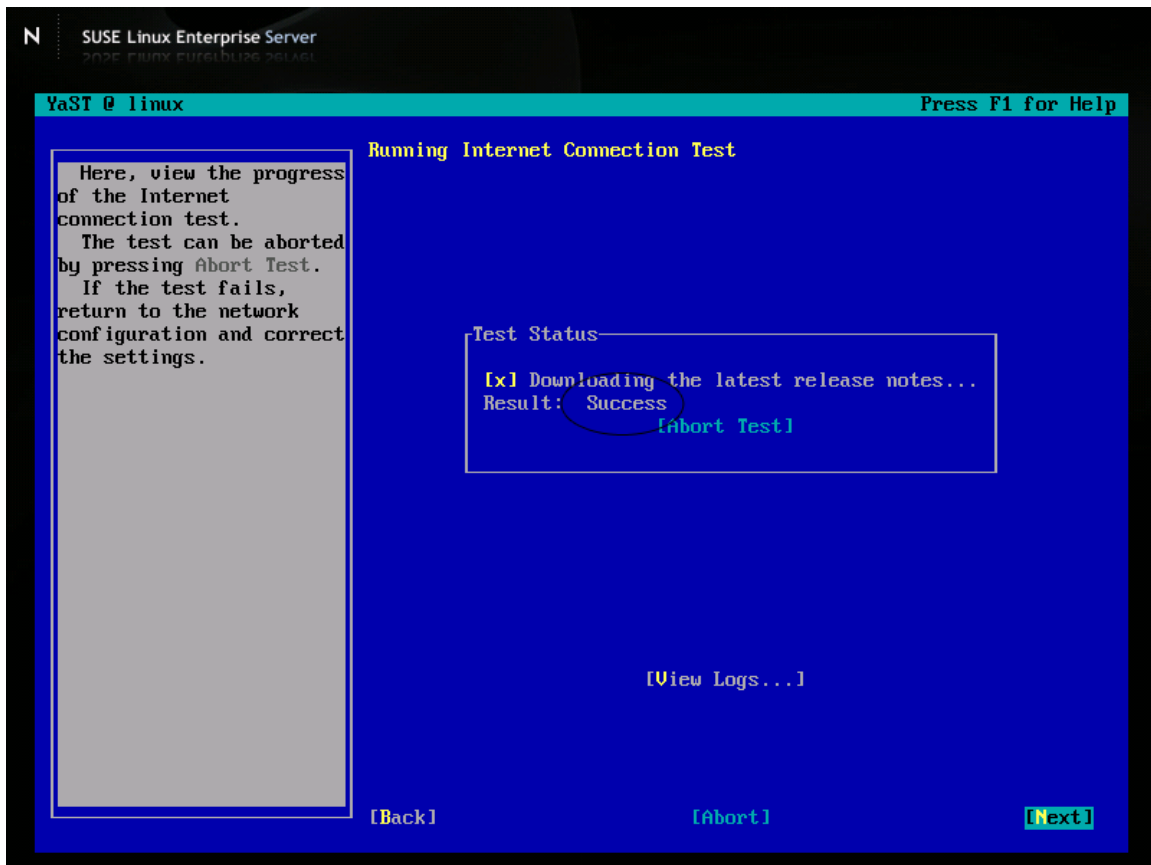
[Abort]

[Back]

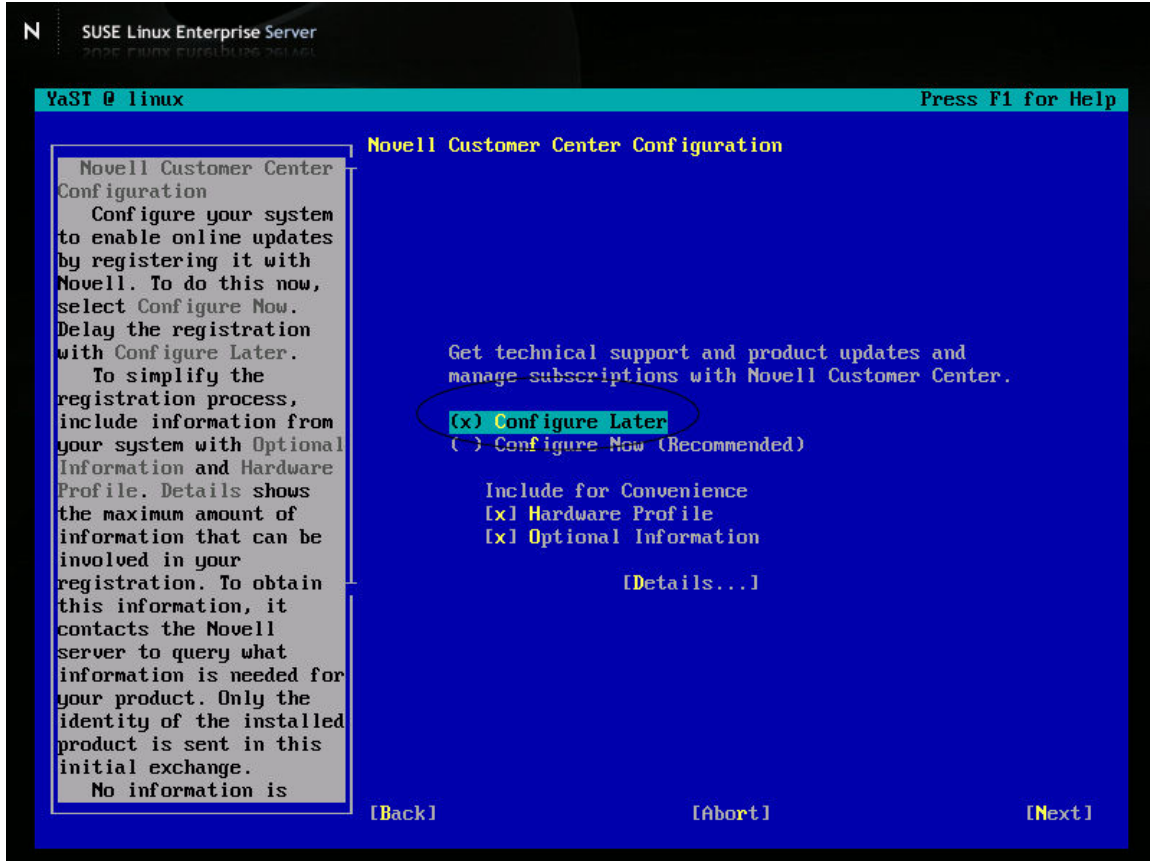
[Next]

SuSE will now save the configuration.

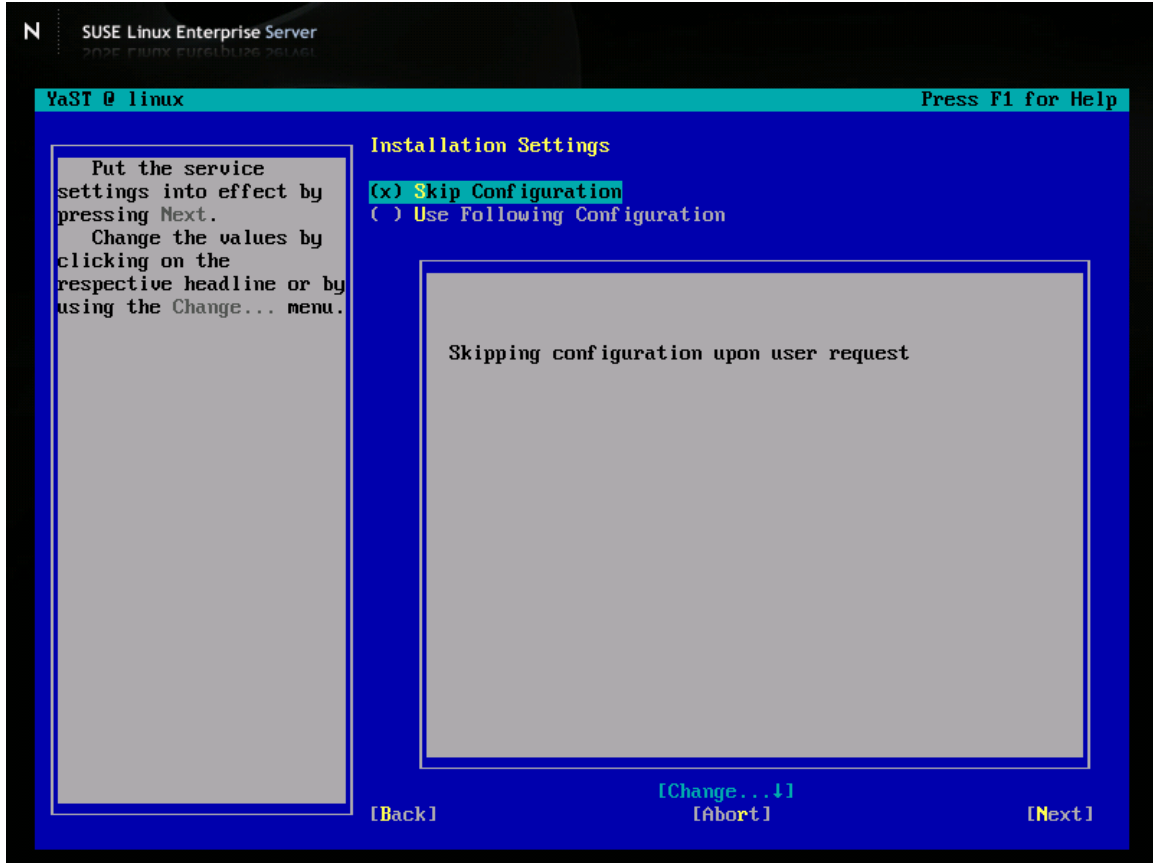
Test your internet connection, and look for the Success message.



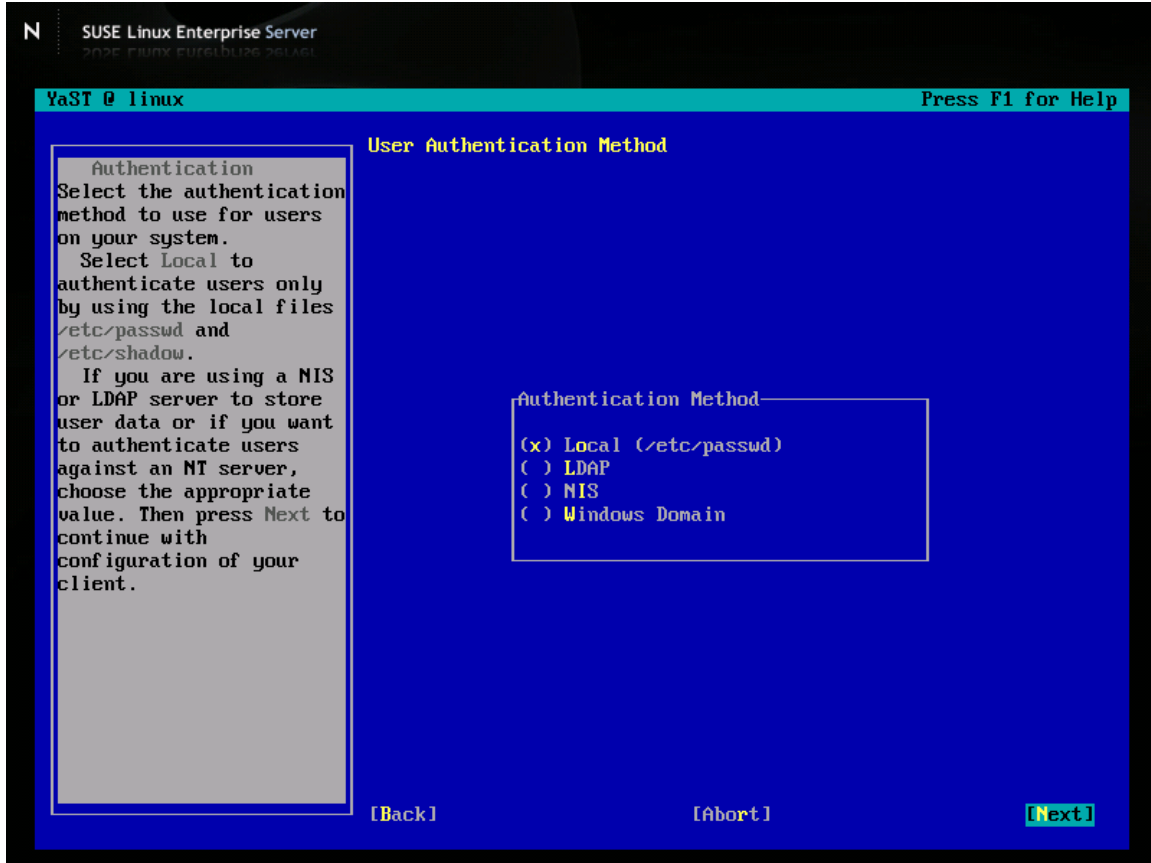
Configure the update later.



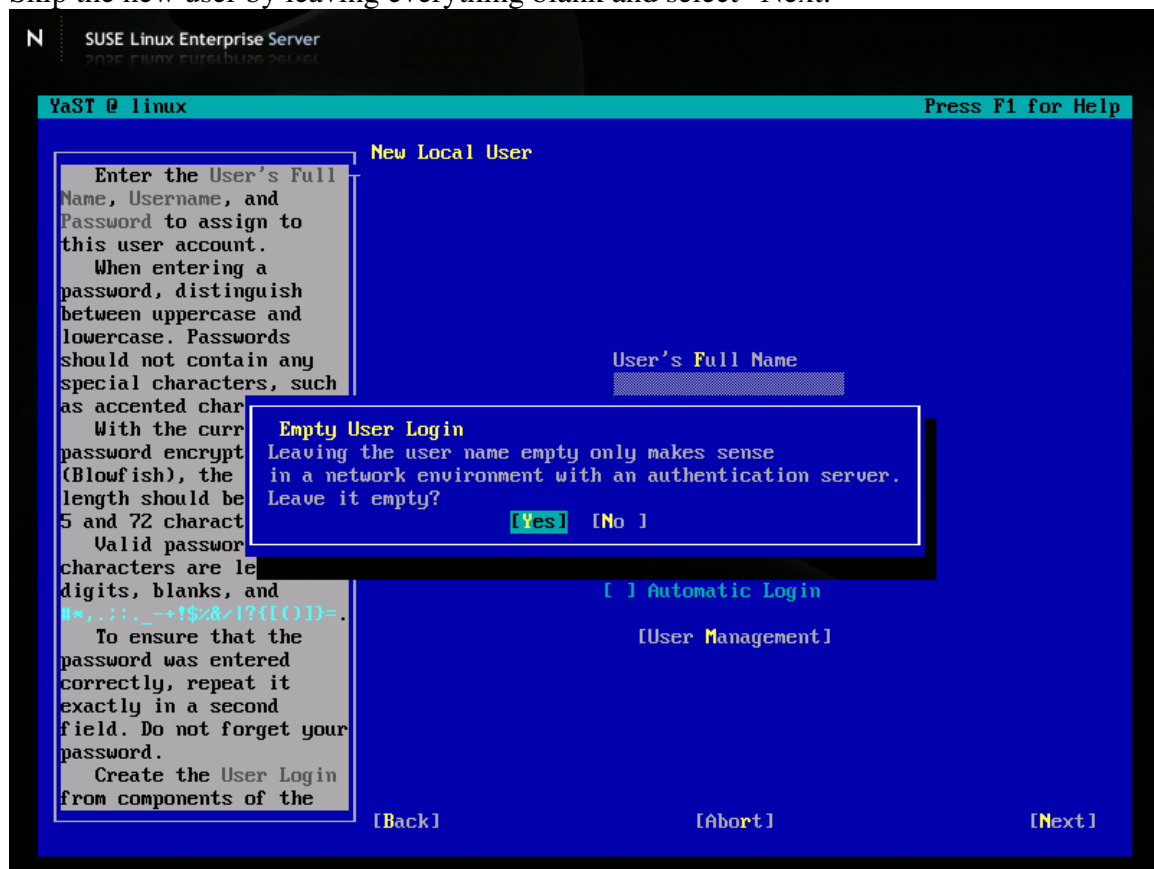
Skip the CA cert configuration.



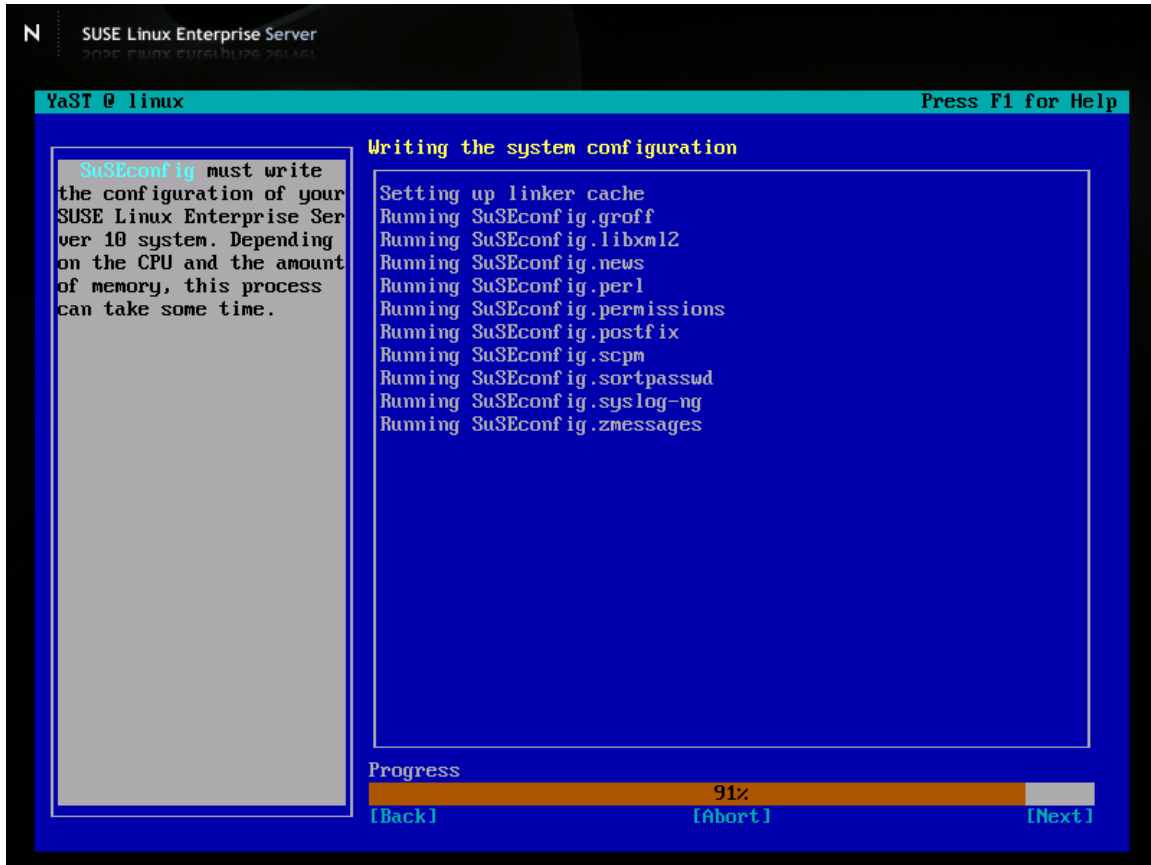
Select "Local" as your authentication method.



Skip the new user by leaving everything blank and select “Next.”

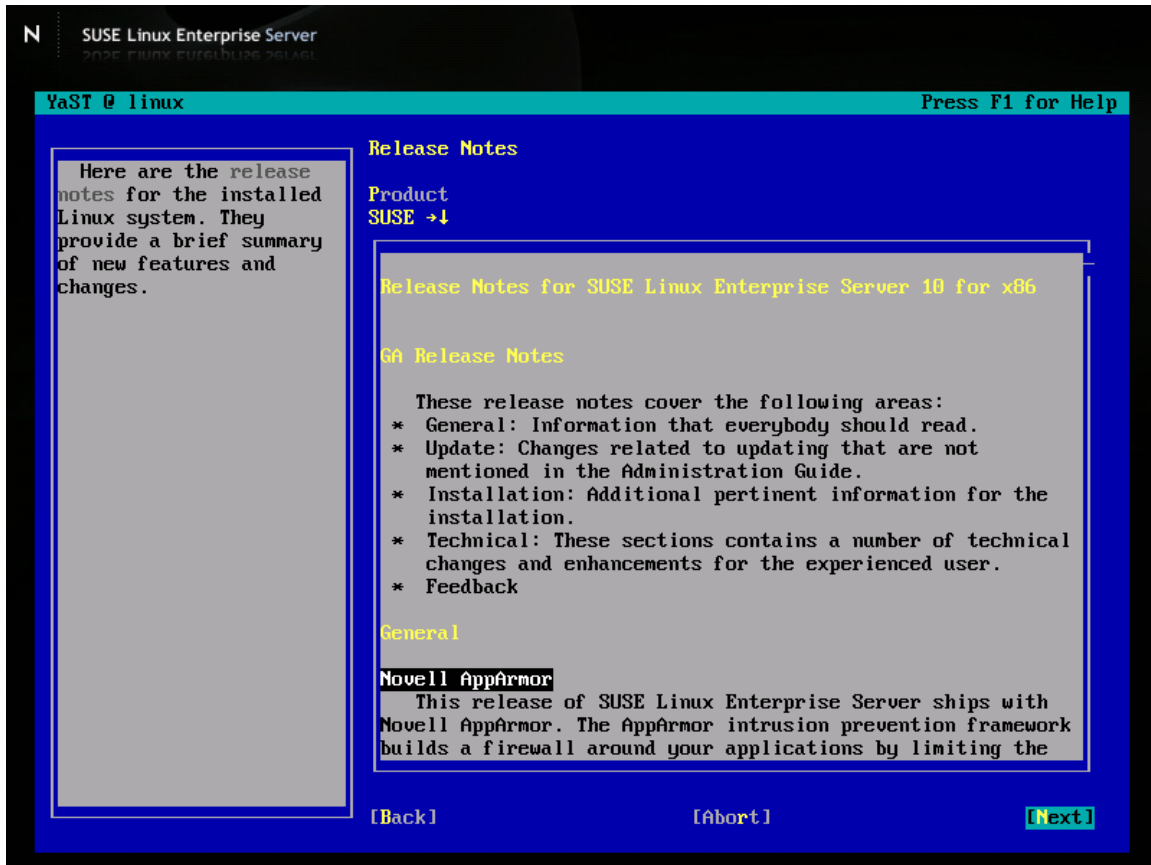


SuSE will now write some more configuration files.

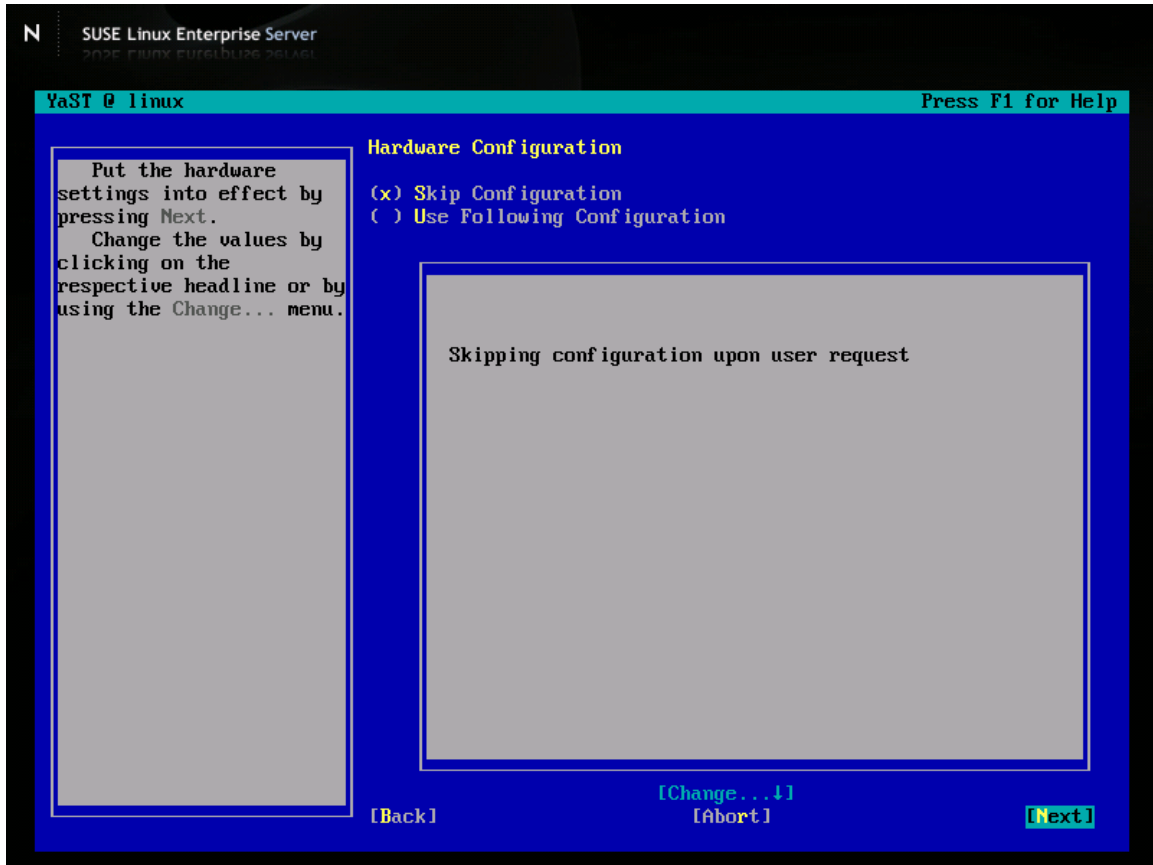




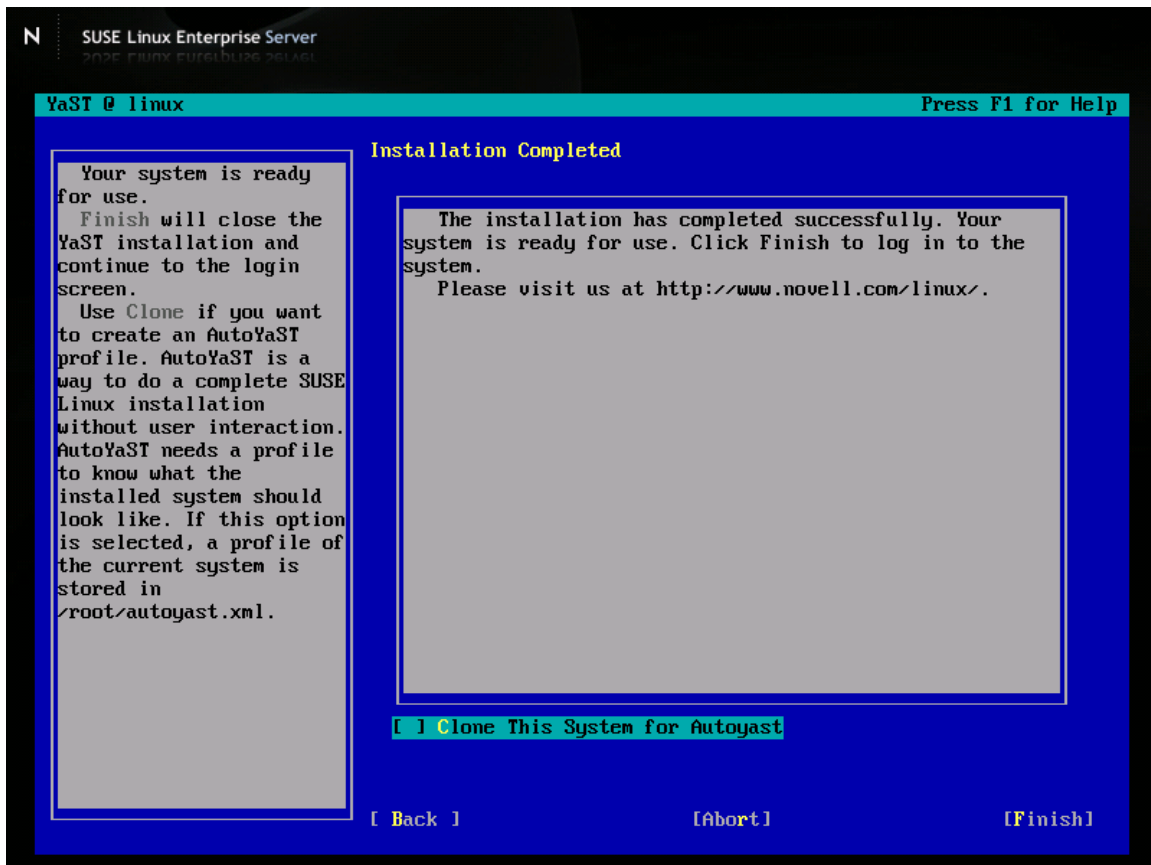
Now SuSE will bring up some release notes. Take a quick peak if you really want to; otherwise just keep moving forward by selecting “Next”.



Skip the hardware configuration.



Your SuSE **base** installation is now complete. Before you select Finish, uncheck the box that says “Clone This System for Autoyast.” We won’t be using Autoyast, so why clone the whole system?



SuSE will now start all of its services configurations. You will be left with a login prompt, where you have to login using the username “root”, and the password you set earlier for the root account.

```
N SUSE Linux Enterprise Server
2020-01-09 09:09:09

Starting Name Service Cache Daemon done
Starting powersaved: done
Generating /etc/ssh/ssh_host_key.
Generating public/private rsa1 key pair.
Your identification has been saved in /etc/ssh/ssh_host_key.
Your public key has been saved in /etc/ssh/ssh_host_key.pub.
The key fingerprint is:
dc:0e:44:92:1b:e8:9b:f4:5a:3a:4e:52:8e:a1:0f:bd root@linux
Generating /etc/ssh/ssh_host_dsa_key.
Generating public/private dsa key pair.
Your identification has been saved in /etc/ssh/ssh_host_dsa_key.
Your public key has been saved in /etc/ssh/ssh_host_dsa_key.pub.
The key fingerprint is:
af:62:3c:30:7c:60:1c:3d:0f:19:8c:7d:b1:d2:17:17 root@linux
Generating /etc/ssh/ssh_host_rsa_key.
Generating public/private rsa key pair.
Your identification has been saved in /etc/ssh/ssh_host_rsa_key.
Your public key has been saved in /etc/ssh/ssh_host_rsa_key.pub.
The key fingerprint is:
4e:fb:85:18:c9:11:44:31:21:37:db:11:74:2e:15:a6 root@linux
Starting SSH daemon done
Starting mail service (Postfix) done
Starting CRON daemon done
Master Resource Control: runlevel 3 has been reached
Skipped services in runlevel 3: nfs microcode

Welcome to SUSE Linux Enterprise Server 10 (i586) - Kernel 2.6.16.21-0.8-default (tty1).

linux login: root
Password:
linux:~ # _
```

Type “yast” at the shell prompt and hit enter.

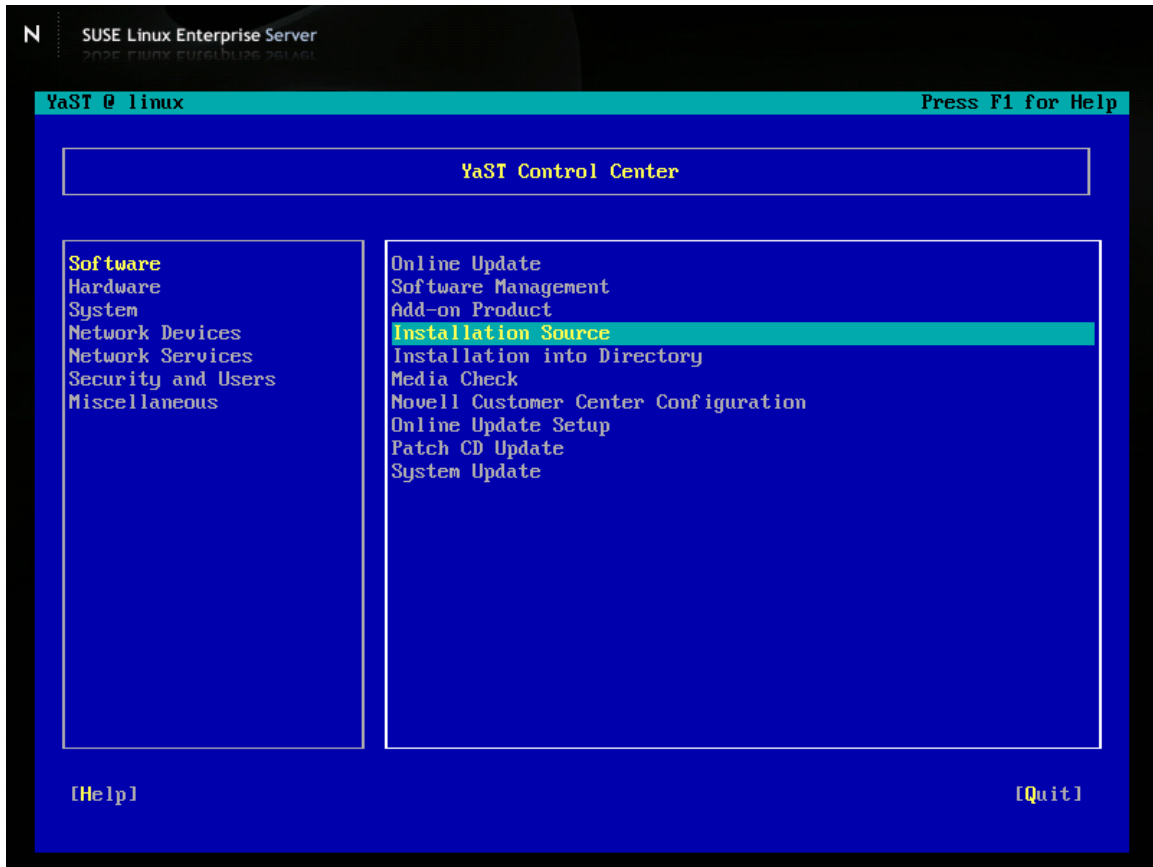
```
N SUSE Linux Enterprise Server
2002 01/03 09:01:00

Starting Name Service Cache Daemon done
Starting powersaved: done
Generating /etc/ssh/ssh_host_key.
Generating public/private rsa1 key pair.
Your identification has been saved in /etc/ssh/ssh_host_key.
Your public key has been saved in /etc/ssh/ssh_host_key.pub.
The key fingerprint is:
dc:0e:44:92:1b:e8:9b:f4:5a:3a:4e:52:8e:a1:0f:bd root@linux
Generating /etc/ssh/ssh_host_dsa_key.
Generating public/private dsa key pair.
Your identification has been saved in /etc/ssh/ssh_host_dsa_key.
Your public key has been saved in /etc/ssh/ssh_host_dsa_key.pub.
The key fingerprint is:
af:62:3c:30:7c:60:1c:3d:0f:19:8c:7d:b1:d2:17:17 root@linux
Generating /etc/ssh/ssh_host_rsa_key.
Generating public/private rsa key pair.
Your identification has been saved in /etc/ssh/ssh_host_rsa_key.
Your public key has been saved in /etc/ssh/ssh_host_rsa_key.pub.
The key fingerprint is:
4e:fb:85:18:c9:11:44:31:21:37:db:11:74:2e:15:a6 root@linux
Starting SSH daemon done
Starting mail service (Postfix) done
Starting CRON daemon done
Master Resource Control: runlevel 3 has been reached
Skipped services in runlevel 3: nfs microcode

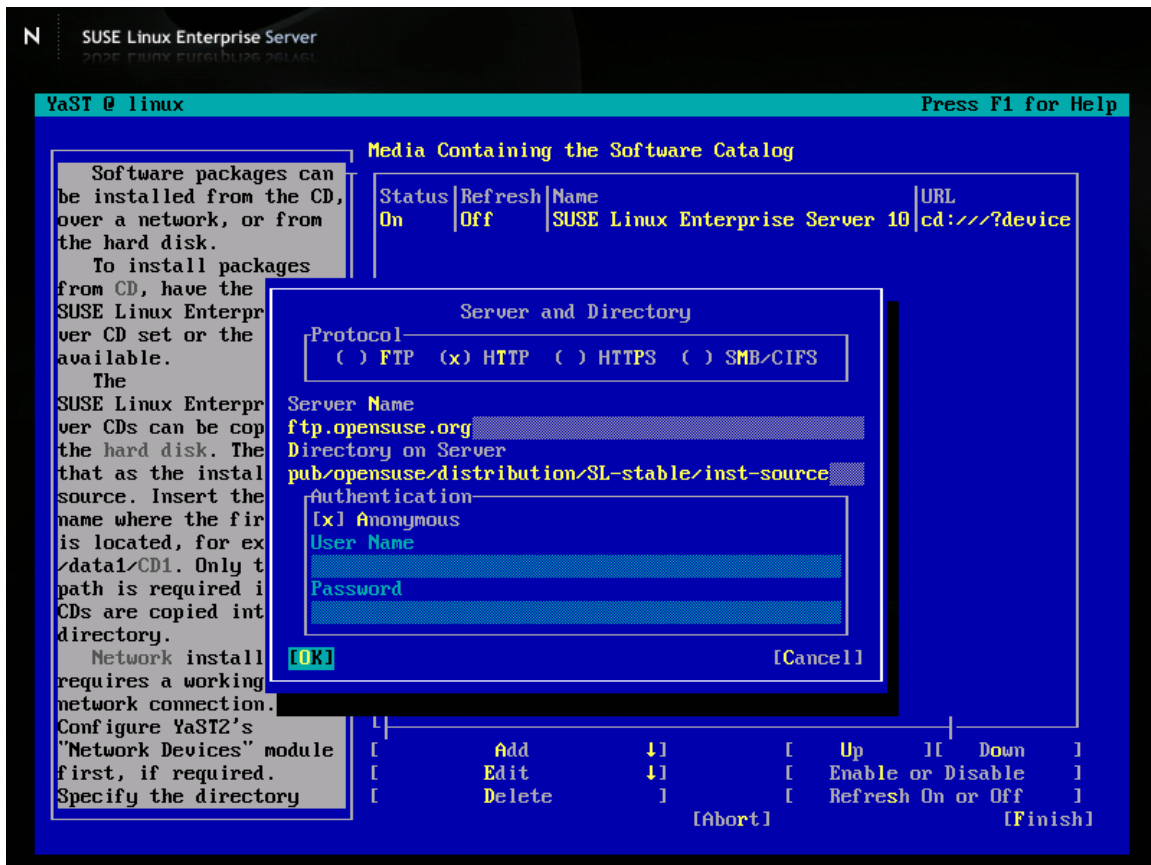
Welcome to SUSE Linux Enterprise Server 10 (i586) - Kernel 2.6.16.21-0.8-default (tty1).

linux login: root
Password:
linux:~ # yast_
```

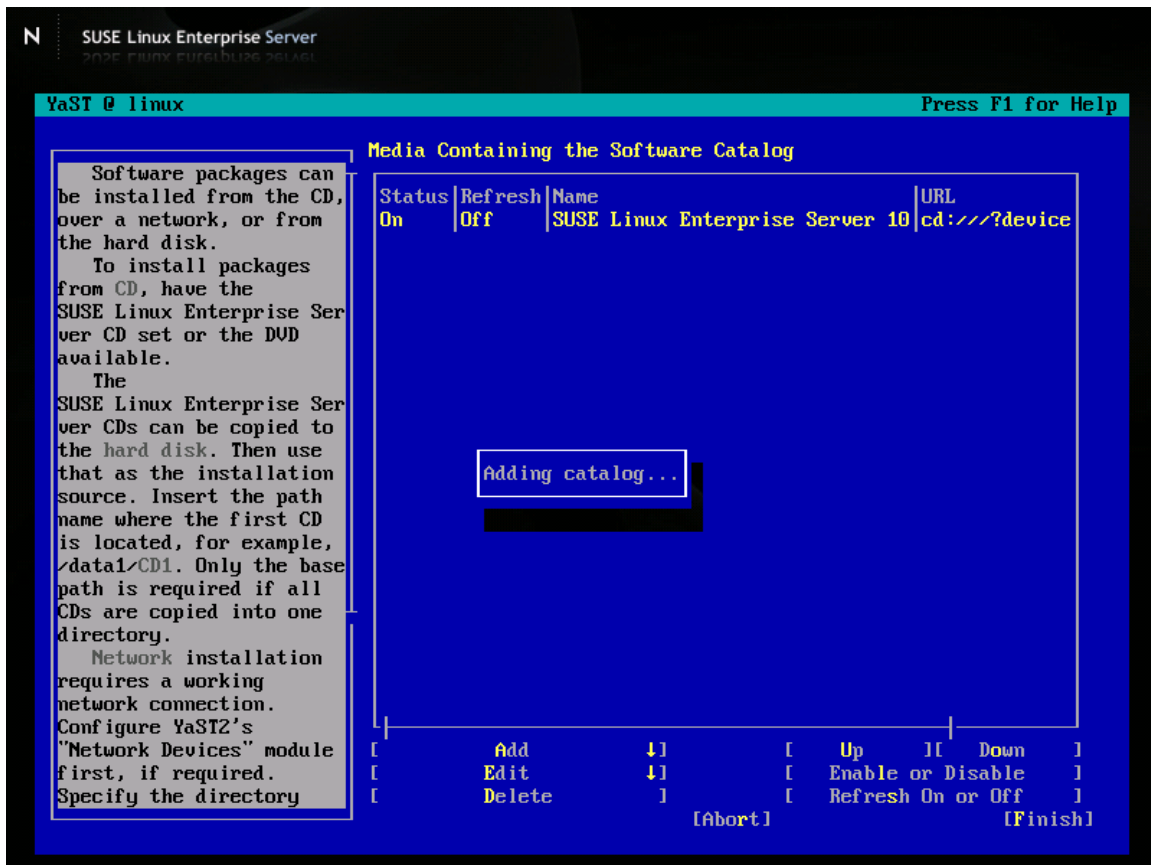
Select "Installation Source" and press enter. TAB our way to "Add", select an HTTP source and hit enter.



Now we will add an internet archive of the most up-to-date SuSE installation available. For this demonstration, we will use the official SuSE server as the source. Match your window to the following screenshot.

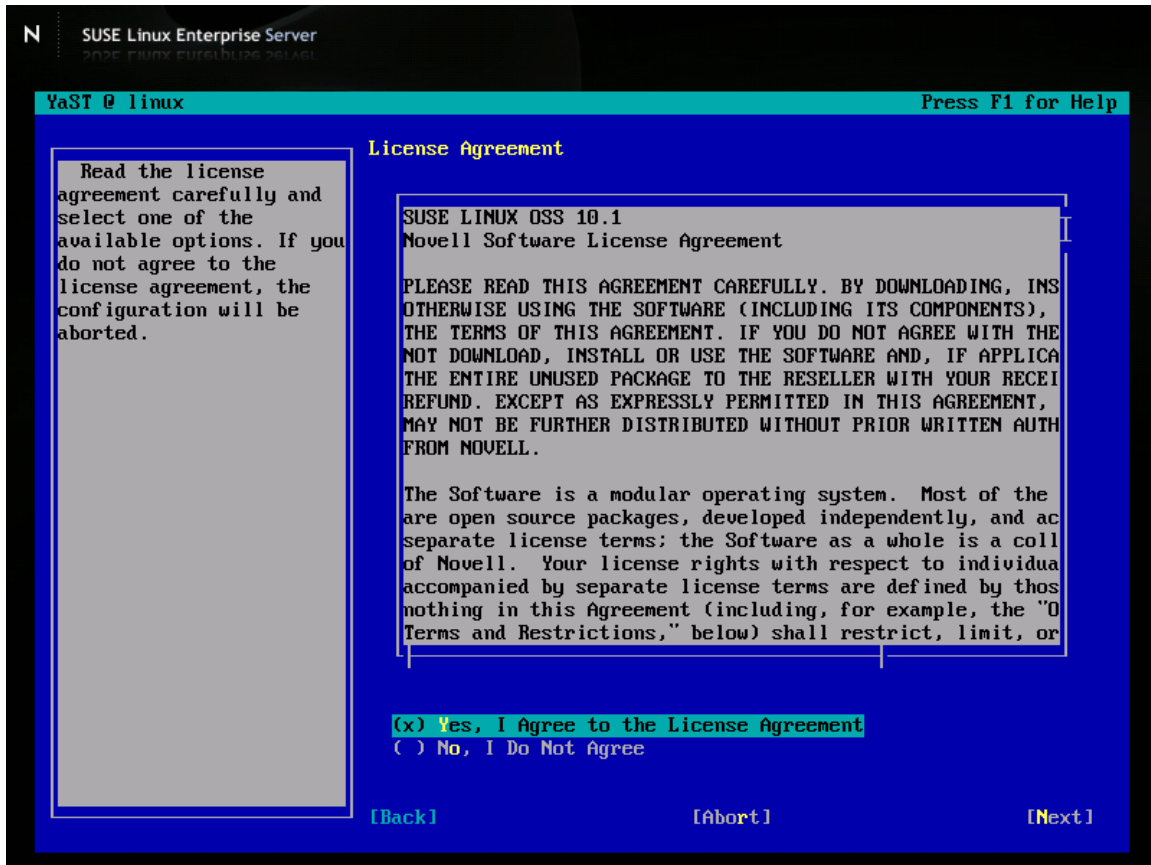


YaST will now query the web folder for available packages and add them to a local list. This process takes a long time and it will look like your system is hanging but really it isn't. Just give it time, lots and lots of time (~10minutes max).

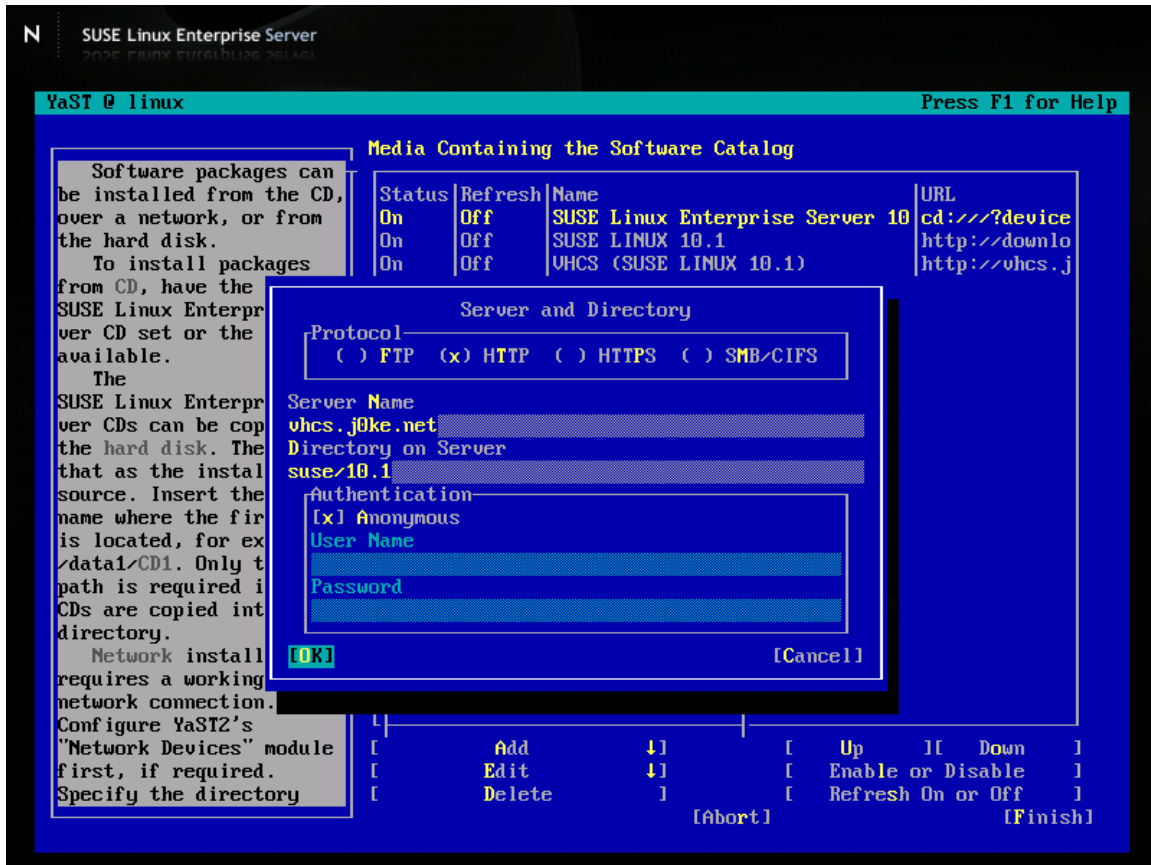




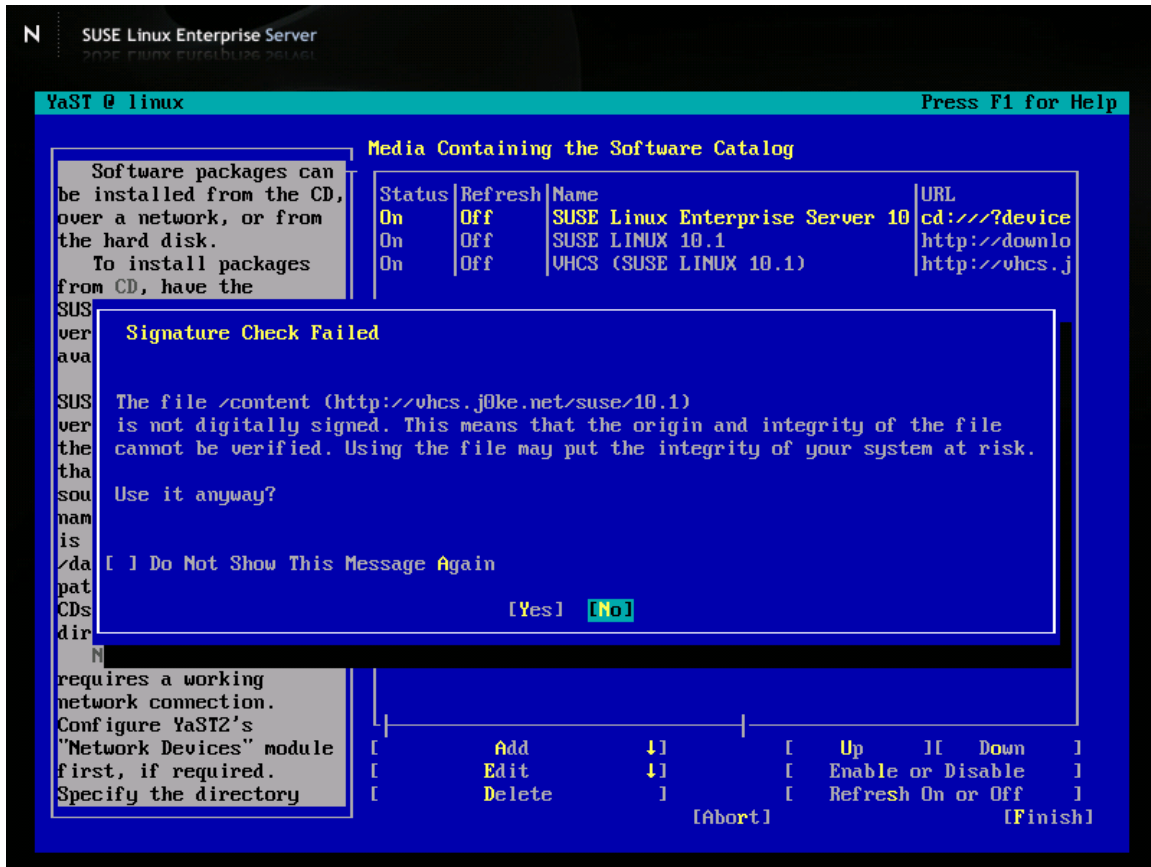
Once it's done adding the catalog, a license will appear. Agree to the license and select "Next."



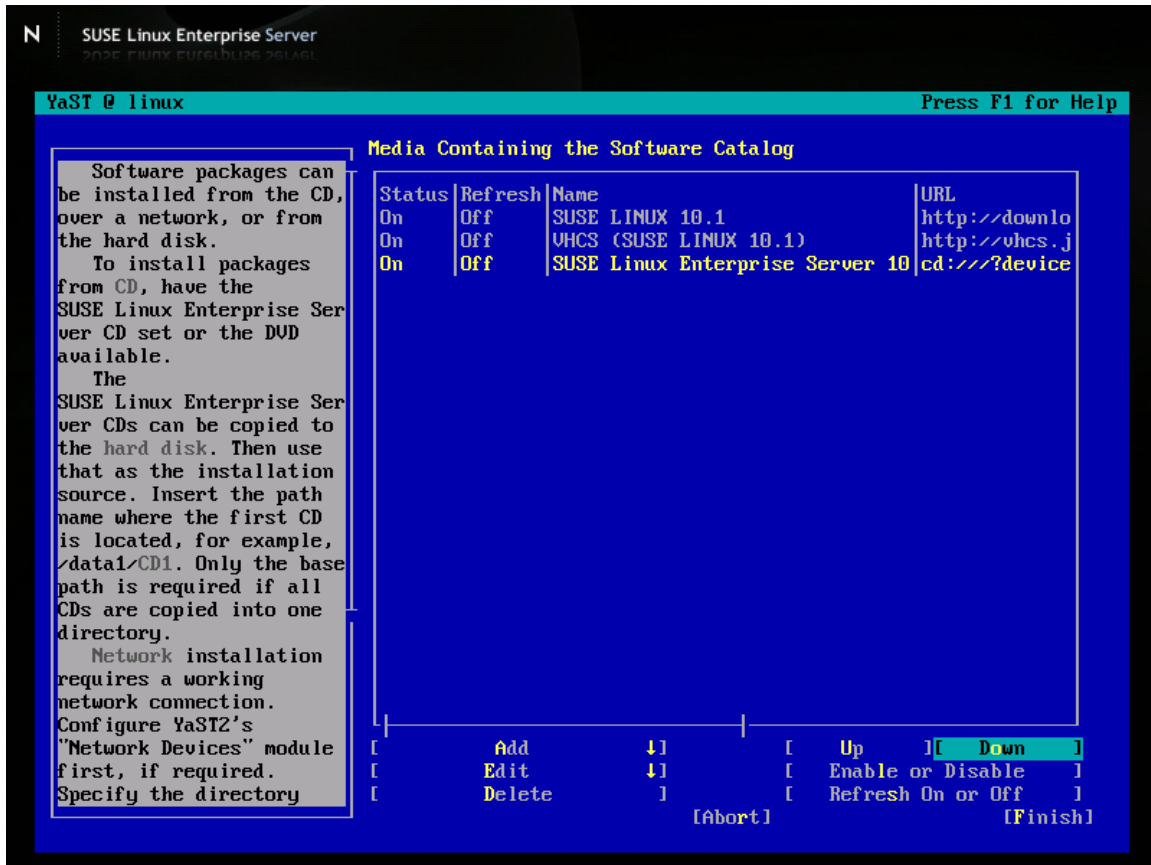
Now we need to add another HTTP source, this one will be to download VHCS2. Match your screen to the following screenshot.



This time, when you hit OK, you will be confronted with a warning. Accept the warning by selecting yes.

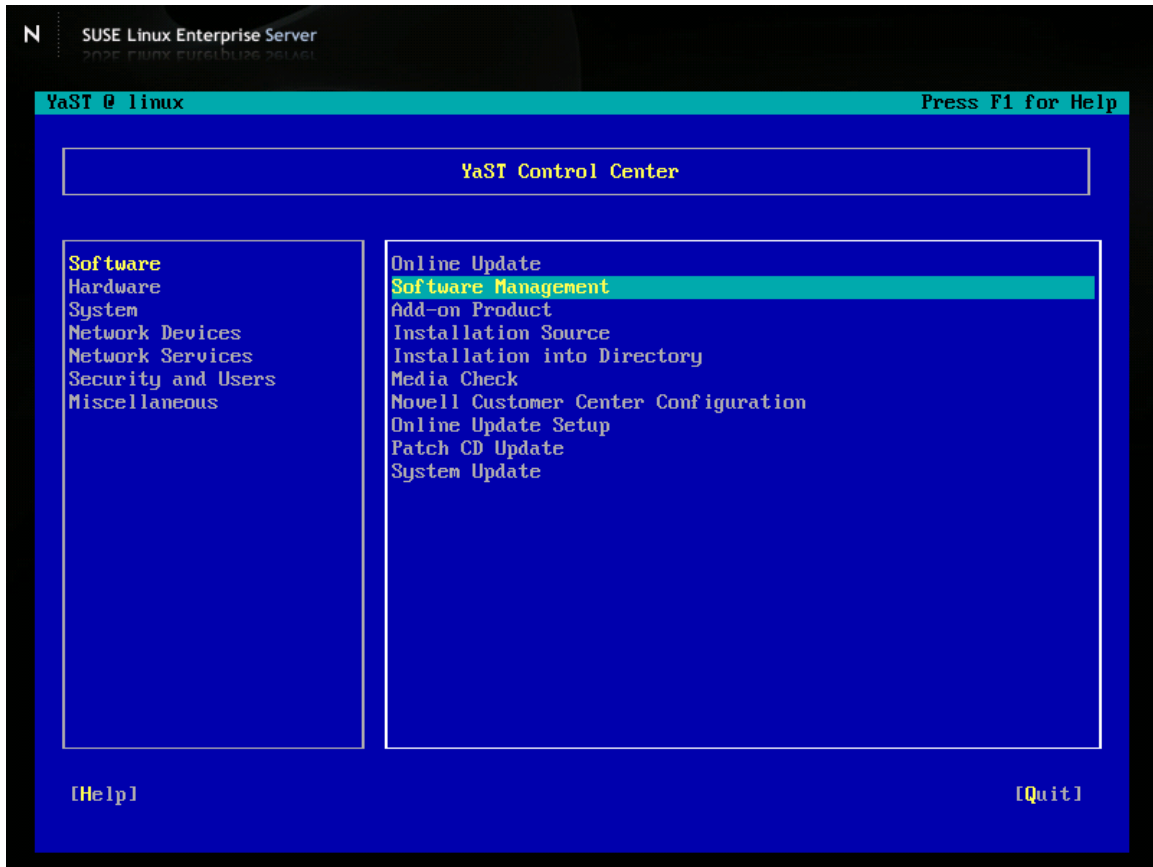


Next we need to change to order of which YaST searches for software packages. We want it to look on the internet site before it looks on the CD because the internet site is likely to be more update. Select the source that starts with the URL “cd:///”, then use the TAB key to move to the “Down” option (bottom-right corner) and press ENTER until it moves to the bottom of the list. It should match the next screenshot.

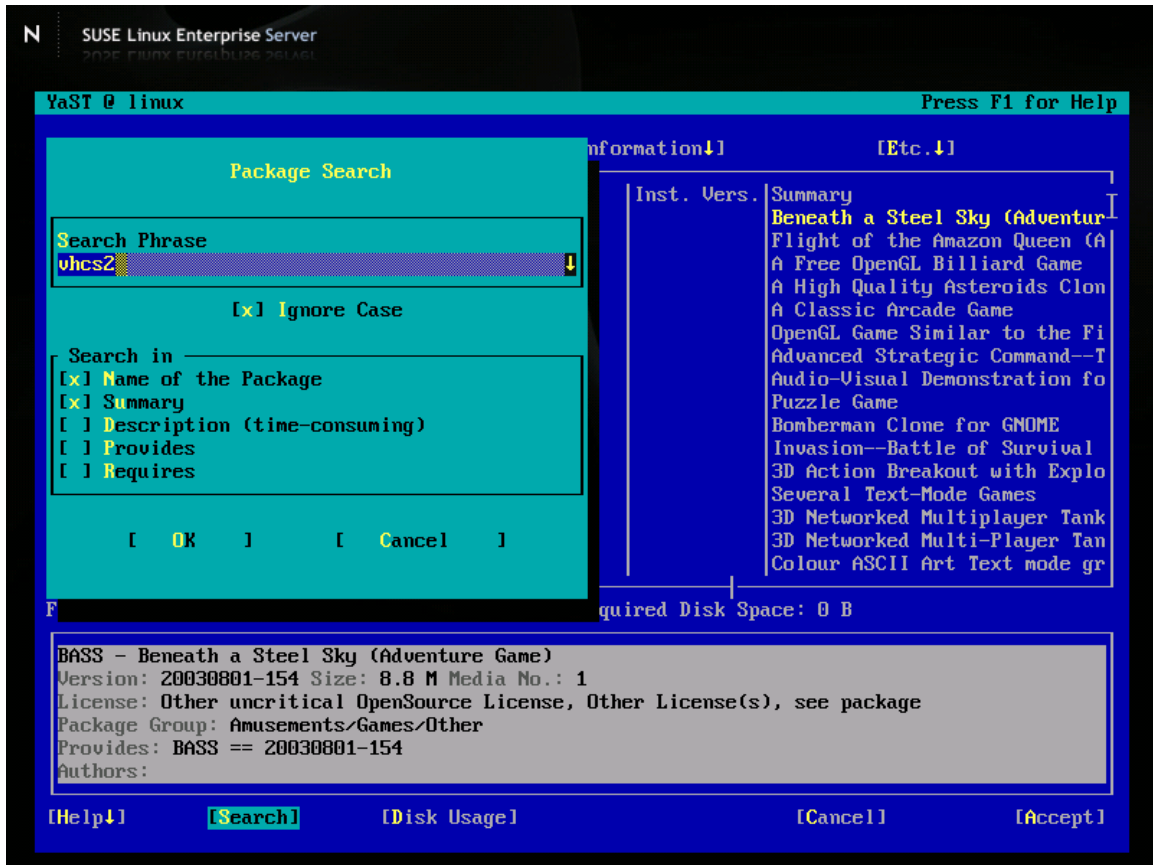


We're now done adding installation sources, select "Finish."

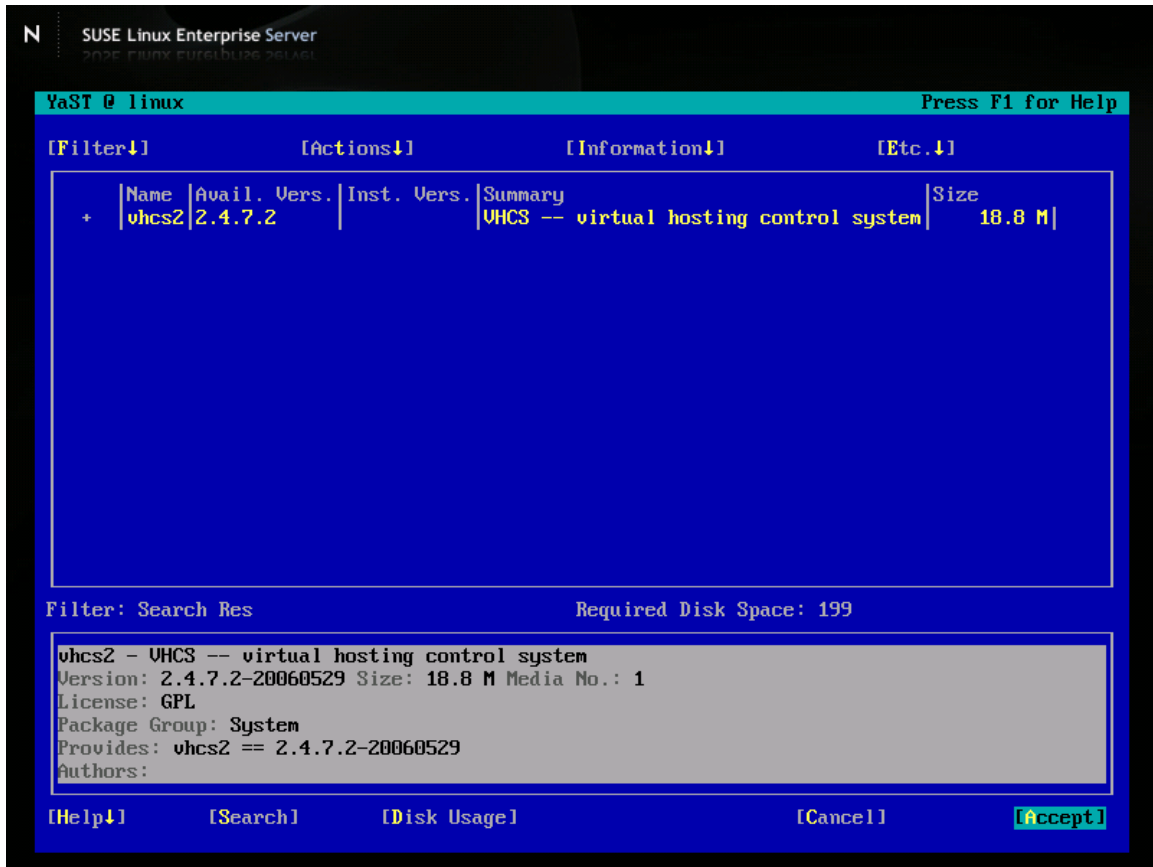
Back at the main YaST menu, select “Software Management” from the “Software” section and press ENTER.



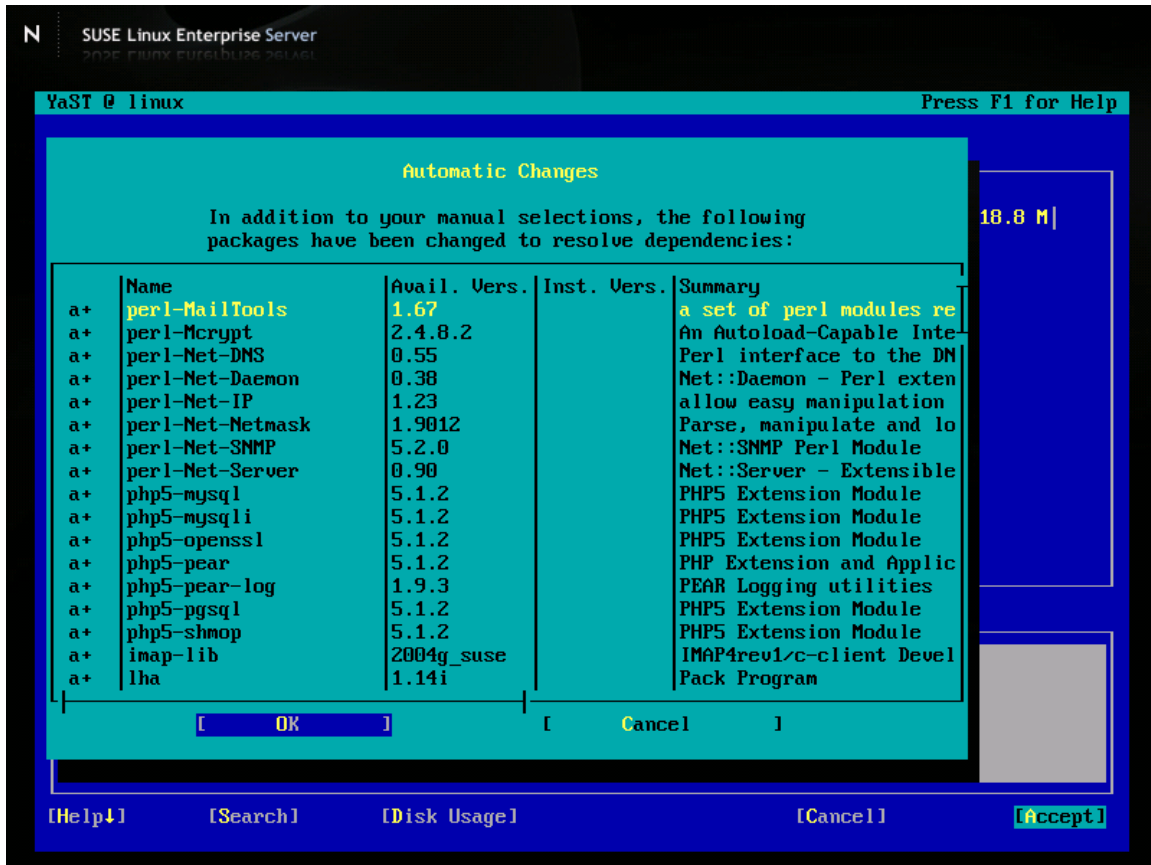
YaST will now load up the huge list of available software to choose from. Once it's done loading, TAB until you get to Search (bottom-left corner). Search for "vhcs2".



Press the SPACEBAR to select the package for installation. A little “+” will appear to the left of the name indicating that it’s been selected. Now “Accept” the packages.

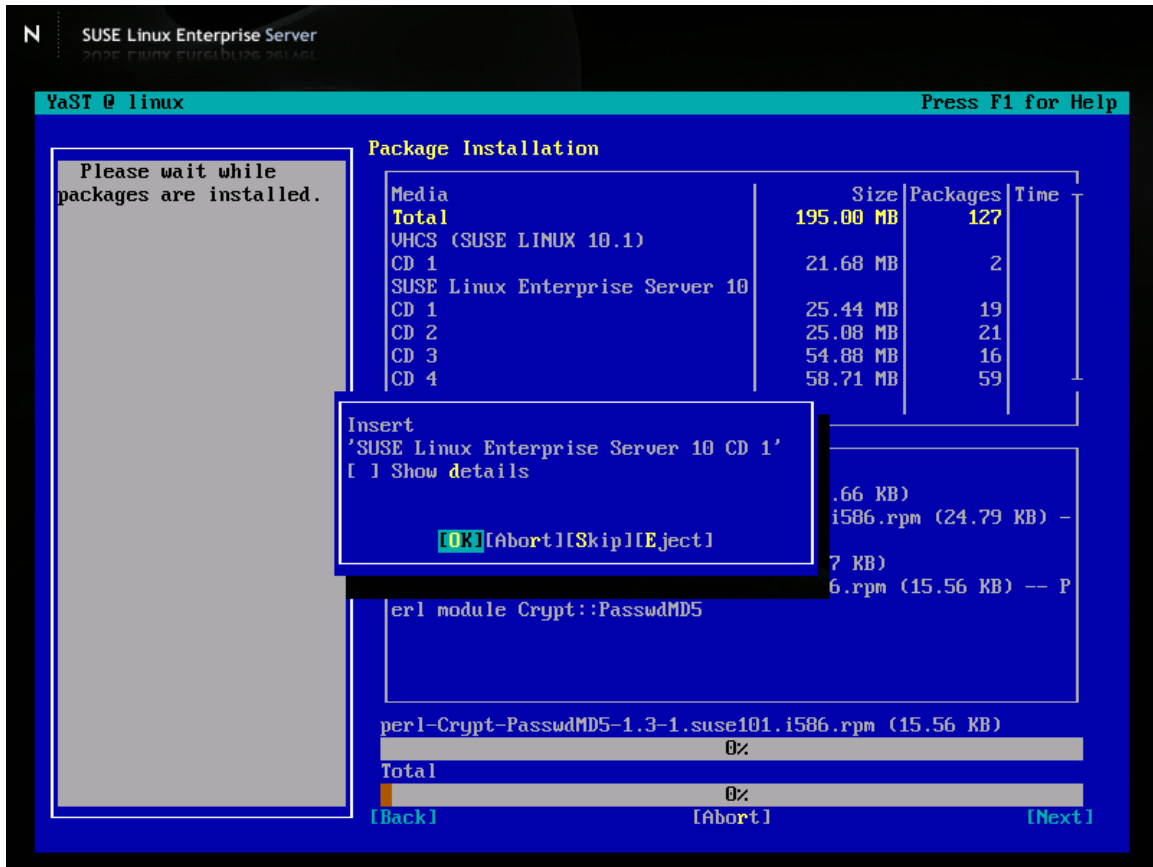


YaST will detect server packages missing from the server that hosts VHCS2 (vhcs.j0ke.net). That's why we added the download.opensuse.org installation source, to provide the missing packages. All you need to do is TAB to "OK" and it will begin the download. You will need your SuSE CDs handy.

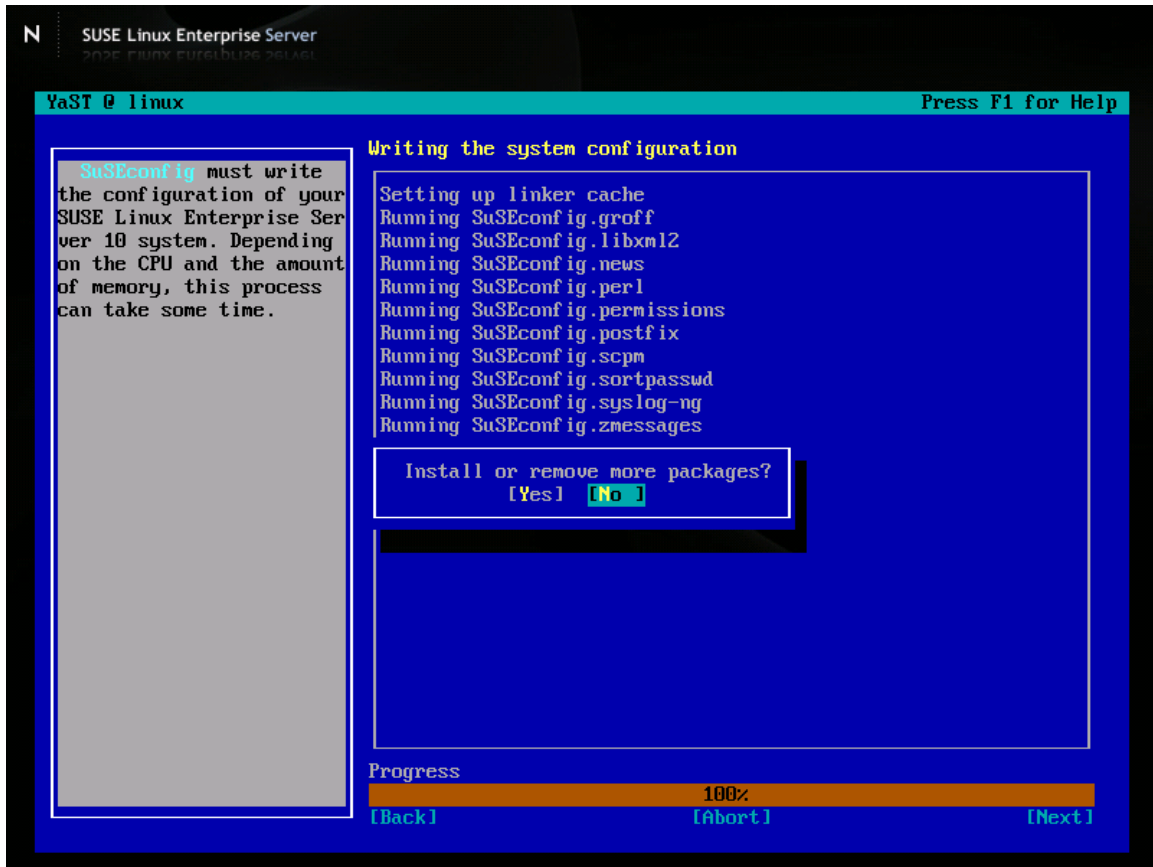




SuSE will now begin the download and installation processes and periodically ask you for a CD.



Once YaST is done installing all of the packages it will write the configuration files and then prompt you to install additional software, which we decline by selecting “No”.




You're now brought to the main YaST window. Exit YaST.

The next step is to assign a root password for the MySQL server, to protect yourself from letting strangers access your database(s) freely. Type the following command in the shell to set the password and press enter:

“mysqladmin password thisismynewpassword”

Remember this password! We will use it in a minute!

A terminal window with a black background and a blue rectangular area in the center. The terminal text at the bottom shows the command being executed and the resulting prompt.

```
N SUSE Linux Enterprise Server
2020-01-01 09:00:00

linux:~ # mysqladmin password abc123def321
linux:~ # /srv/www/vhcs2/engine/setup/vhcs2-setup
```

Now we will execute the VHCS2 setup file. Type the following into the shell:  
“/srv/www/vhcs2/engine/setup/vhcs2-setup”  
You can use the default values for everything except when asked for the “SQL password”.

```
N SUSE Linux Enterprise Server
2008 04/04 09:01:00

linux:~ # mysqladmin password abc123def321
linux:~ # /srv/www/vhcs2/engine/setup/vhcs2-setup

Welcome to VHCS2 '2.4 Spartacus' Setup Dialog.

This program will set up VHCS2 system on your server.

Please press 'Enter' to continue.

Please enter system hostname (Enter for defaults) [linux]:

Please enter system network address (Enter for defaults) [192.168.241.129]:

Please enter SQL server host (Enter for defaults) [localhost]:

Please enter system SQL database (Enter for defaults) [vhcs2]:

Please enter system SQL user (Enter for defaults) [root]:

Please enter system SQL password (Enter for defaults) [none]:
Please repeat system SQL password:

Please enter VHCS ftp SQL user (Enter for defaults) [vftp]:

Please enter VHCS ftp SQL user password (Enter for defaults) [none]:

Please enter administrator login name (Enter for defaults) [admin]:

Please enter administrator password:
Please repeat administrator password:

Please enter administrator email address: jcbgamin@jcbgaming.com
```

If everything checks out (which it should), VHCS will begin installing all of the files onto the computer, and then notify you that it's been successfully installed.

```
N SUSE Linux Enterprise Server
>>> 2010-09-01 14:00:00

0700 root:root /srv/www/vhcs2/engine/setup/set-engine-permissions.sh
0700 root:root /srv/www/vhcs2/engine/setup/vhcs2-setup
0700 root:root [/srv/www/vhcs2/engine/tools]
0700 root:root /srv/www/vhcs2/engine/tools/vhcs2phptemp.sh
0700 root:root /srv/www/vhcs2/engine/tools/vhcs2-httpd-logs-mngr
0700 root:root /srv/www/vhcs2/engine/vhcs2-srv-mngr
0700 root:root /srv/www/vhcs2/engine/vhcs2-dmn-mngr
0700 root:root /srv/www/vhcs2/engine/vhcs2-sub-mngr
0700 root:root /srv/www/vhcs2/engine/vhcs2-als-mngr
0700 root:root /srv/www/vhcs2/engine/vhcs2-htuser-mngr
0700 root:root [/srv/www/vhcs2/engine/backup]
0700 root:root /srv/www/vhcs2/engine/backup/vhcs2-bk-task
0700 root:root /srv/www/vhcs2/engine/backup/vhcs2-backup-all
0700 root:root /srv/www/vhcs2/engine/vhcs2-mbox-mngr
0700 root:root [/srv/www/vhcs2/engine/traffic]
0700 root:root /srv/www/vhcs2/engine/traffic/vhcs2-vr1-traff
0700 root:root /srv/www/vhcs2/engine/traffic/vhcs2-vr1-traff-SUSE
0700 root:root /srv/www/vhcs2/engine/traffic/vhcs2-srv-traff
0700 root:root /srv/www/vhcs2/engine/vhcs2-db-keys.pl
0700 root:root /srv/www/vhcs2/engine/vhcs2-db-passwd
0700 root:root /srv/www/vhcs2/engine/vhcs2_common_code.pl
0700 vmail:vmail [/srv/www/vhcs2/engine/messenger]
0755 root:root folder [/srv/www/vhcs2/engine/messenger]
0755 vmail:vmail folder [/var/log/vhcs2/vhcs2-arpl-mngr]

Congratulations !

VHCS2 '2.4 Spartacus' Setup completed successfully !

Please type http://192.168.241.129/vhcs2/ in your
browser!

linux:~ #
```

Write down this address. We need to restart the server to be sure that all of the services start properly. Type this in the shell:

“shutdown -r now”

Congratulations! You have successfully installed VHCS2 on your computer! Now enter the address you wrote down into your web browser and complete any additional steps.

Note: for VMware users, we still have a few more steps to go!

For VMware users, we need to forward the outgoing ports from the virtual IP to the “outside world” so that anybody can access your server.

At the Shell prompt, type the following:  
“ifconfig -a”

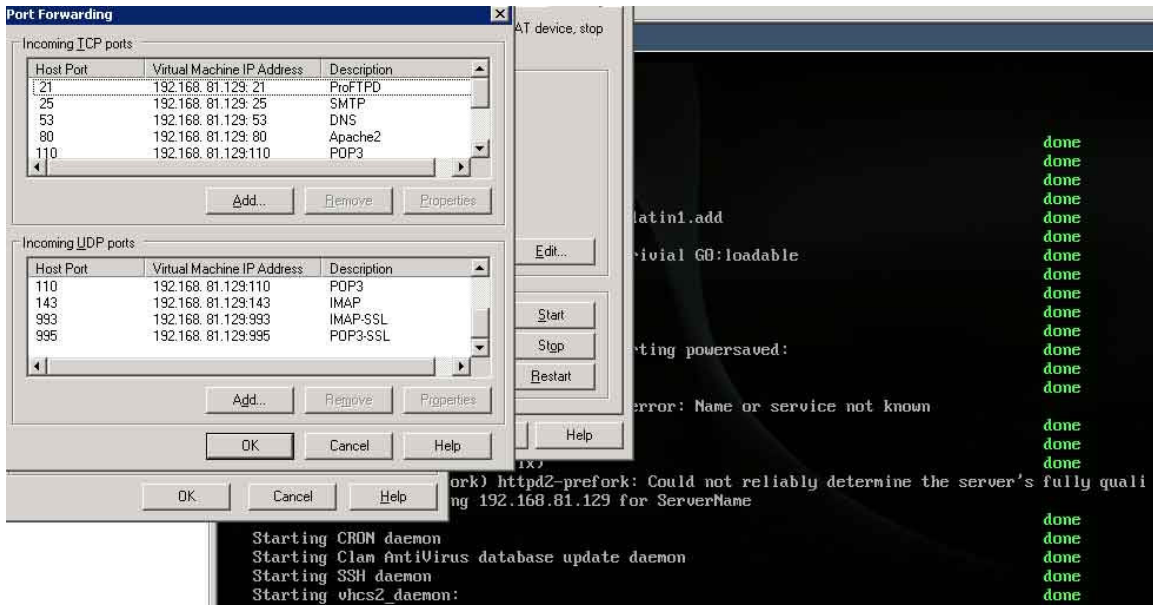
```
N SUSE Linux Enterprise Server
linux:~ # ifconfig -a
eth0: flags=4163<UP,BROADCAST,NOLOOP,MULTICAST> MTU:1500 Metric:1
    inet addr:192.168.241.129 Bcast:192.168.241.255 Mask:255.255.255.0
    inet6 addr: fe80::20c:2960:1e3d:dafb/64 Scope:Link
    UP BROADCAST NOTRAILERS RUNNING MULTICAST MTU:1500 Metric:1
    RX packets:47804 errors:0 dropped:0 overruns:0 frame:0
    TX packets:23100 errors:0 dropped:0 overruns:0 carrier:0
    collisions:0 txqueuelen:1000
    RX bytes:71459451 (68.1 Mb) TX bytes:1288292 (1.2 Mb)
    Interrupt:177 Base address:0x1400

lo: flags=73<UP,LOOPBACK,RUNNING> MTU:16436 Metric:1
    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:38 errors:0 dropped:0 overruns:0 frame:0
    TX packets:38 errors:0 dropped:0 overruns:0 carrier:0
    collisions:0 txqueuelen:0
    RX bytes:3760 (3.6 Kb) TX bytes:3760 (3.6 Kb)

sit0: flags=0<> MTU:1480 Metric:1
    NDARP MTU:1480 Metric:1
    RX packets:0 errors:0 dropped:0 overruns:0 frame:0
    TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
    collisions:0 txqueuelen:0
    RX bytes:0 (0.0 b) TX bytes:0 (0.0 b)

linux:~ # _
```

- In VMware, click on the Edit tab at the top of the window, and select Virtual Network Settings.
- Select the NAT tab, and then click on the button labeled “Edit”
- Click on the button labeled “Port Forwarding”
- Except for the IP address, which you’ll use the one you got from typing “ifconfig -a” in the shell, copy the following data into your own Port Forwarding window. The TCP and UDP sections should be the same; there are 8 pairs of ports (8 for TCP, 8 for UDP) that should be present. The TCP ports should list the same as the UDP ports.



Keep clicking ok until you're out of the network config.

Go to [whatismyip.com](http://whatismyip.com), and get your ip address. Type the IP address in a web browser like so:

"http://ipaddresshere/vhcs2"

You're done!

This walkthrough was written by Corey Regan ([crazy\\_drummer69@hotmail.com](mailto:crazy_drummer69@hotmail.com)) of JCBGaming.com. All screenshots were done by me (Corey), as well as all of the text. The VHCS2 download like is courtesy of [j0ke.net](http://j0ke.net).