Boot from a openSuSE 10.3 DVD (or CD if no DVD available)

Preparations

Have the following available to follow this installation instructions:

- openSuSE 10.3 DVD or CD
- bootable external DVD or CD Drive in case the server you are installing on does not have a DVD or CD Drive.
- 45 minutes to 4 hours of time depending on the speed of your server, Internet connection and DVD/CD-drive, the drive might have the bigger influence on speed then anything else.
- Internet connection. If you have a very fast Internet connection (10mbit or more) you might want to consider installing the second part of the OS install from Internet rather then CD/DVD.
- A Desktop or Laptop computer connected to the same Network segment as the Server you are installing.
- Access to the Router that connects this Server to the Internet. (For enterprise
 installs you will want to get your Network Admin in on this, you need at least
 a static IP for the Server and Internet access to download updated packages.
 If using this Server from with and without the Network you should consider
 putting it in a DMZ).
- Patience to follow the instructions even when you think you know it better.
 (Friendly suggestions are welcome however we do not expect all of them to be useful.)
- These instructions assume that you do not have a mouse connected to this computer if you happen to have one at hand you can use it alternatively as well.

As a general remark, The Keyboard Navigation uses [Tab] to move between sections and the cursor Keys to move within fields or sections. The [Space]-bar usually just selects a option while the [Enter]-Key selects and commits the selection in one step.

Whenever you see one of these sections, make sure that you

read them.

even when you think that you know what you are doing!

Getting Started

Boot the Computer and put the disk in the drive. Make sure the disk can be found upon boot-up and that booting from CD/DVD is enabled in the BIOS. If you are not sure how to do this please consult your computers manual or a PC-Consultant.

Boot Screen

The first screen has the following options:

- Boot from Harddisk
- Installation
- Repair installed System
- Rescue System
- Firmware Test
- Memory Test

use the up and down Keys to move the highlighted bar to [Installation] and press [Enter].

Kernel Loading

Please wait for the first Part of the Operating System to Load. If your CD/DVD-drive is not very fast or you booted via USB this can take a while.

Language

Please choose the Language for this Server. For the purpose of this walk-through document we assume you choose [English]. If your Server has a Mouse attached you can use it for the next few screens, we are however not planing to install a graphical environment, so do not get too used to it.

User your mouse or cursor keys to highlight English (in the future I will just say pick or select for this). Then press [AIt] & N to pick the [Next] button.

As a rule of Thumb whenever you see a button with a caption that has a underlined letter you can type [Alt] and the Letter that is underlined to pick this option.

Media Check

If you want to be sure that the Disk you are using is complete and readable by your installation driver. You have the option to check this here. This however takes some time.

When done you can press [Alt] & N to pick the [\underline{N} ext] button.

License Agreement

When satisfied with the License press [Alt] & to select " \underline{Y} es, I agree to the License agreement."

You have to accept the license agreement to continue with the installation.

When done you can press [Alt] & N to pick the [Next] button.

System Probing

OpenSuSE is now checking your hardware configuration, this can take a few minutes on a slower server, but usually should not take more than 2-3 minutes.

Installation Mode

Select Mode
(*) New <u>I</u> nstallation
() <u>U</u> pdate
() Other Options
[] Add Online Repositiories Before Installation
[] Include Add-On Products from Separate Media
New Installation is what we need anyway so you can just hit [AIt] & N to pick
the [Next] button.

Initializing

System loads Data from your installation Source in to a RAM drive for the further progress of the installation.

Clock and Timezone

Pick your Region and Timezone.

Hardware clock should be set to [Local Time].

Make sure the time that is displayed in the lower right hand corner is correct, otherwise fix it. This is an important step, if you skip it OS updates may fail and the automatic time synchronization will not engage!

When done you can press [Alt] & N to pick the [\underline{N} ext] button.

Desktop Selection

Since this is going to be a ViciDial[™] Server, it is not necessary to have a Graphical User Interface (GUI), it would actually decrease the performance of the system to run one at the same time.

Important: Please select [!_ther] -> ["_ext # ode] here!
If you skip this the System will not only install a Graphical Desktop on your Server, but a large selection of Programs that can be used which these Desktops. Our further Package selection assumes that you pick [!_ther] and ["_ext # ode]!

Exception: If this system is setup somewhere where you do not have access to another Computer on the same Network segment, you might need it to search for information, load leads from the Internet or use it to run the web based configuration of ViciDial $^{\text{TM}}$, please pick [#inimal srahical &ystem]

When done you can press [Alt] & N to pick the [Next] button.

Installation Setting

In Overview mode (Left Tab on the top of screen) you will see the following Sections:

- Partitioning
- Software
- Locale Settings

Please switch to Expert mode (Right Tab on the top of screen). In Expert mode you will see the following Sections:

- System
- Keyboard Layout
- Partitioning
- Software
- Booting
- Timezone
- Language
- Default Runlevel

On this screen we have a number of things to change:

Partitioning

We have two basic options to configure the Partitioning of the Hard-drive(s) on a ViciDial™ System.

a) Systems with **one Hard-drive or Hardware RAID** controller.

Hardware R I! controller, especially those with "ache are #enerally preferred for -c! ial™, they increase the performance and relia%ility of a system.

Systems with sin#le! rives, especially those with consumer #rade drives as opposed to enterprise #rade, **will fail**. Some will fail later then others %ut we have seen systems fail after as little as one wee&.

'nterprise #rade drives are usually desi#ned to withstand () times the use of consumer drives.

%) Systems with two identical Hard*drives in a Software RAID (.

+his Solution is less desira%le %ut it wor&s. +ypical scenarios to use this setup is for machines that can not ta&e a hardware cache controller. , ith this option you have to create on each of the drives identical partitions and then tell -inu. to mirror the data %etween them.

/ress [Alt] & C and then [Alt] & P #o into the 0/artitionin#1 section. +hen select 0" reate " ustom /artition Setup1 %y pressin# [Alt] & C

- (./ress [Alt] & C to pic& the [Create] %utton. /ress [Alt] & P to select 0/rimary1 then press [Alt] & O to pic& the [Ok] %utton.
- :. Use the ta% &ey to select the file system drop down %o.. /ress the space %ar and then use the up and down &eys to select the file system type., e su##est usin# 0reiserfs1 %ecause of it usually very fast recovery time in cases of /ower*loss, etc. +he other proven alternative would %e 0e. t; 1., hen creatin# the swap partition you have to select 0swap1.
- ; . Use the ta% &ey to select the 0' nd1 te. t %o. under the 0Si<e1 section. 'nter the si<e you want for this partition in #i#a%ytes followed %y 0G51.
- 4. +a% to the 08ount /oint1 drop down %o. . +his is where you select the place in the file system to mount the partition. , hen creatin# the swap partition select the word 0swap1.
- =. /ress [Alt] & O to pic& the [Ok] %utton to create the partition.

If usin# option 0%1 for your partitionin# to create a Software Raid partition do the followin#6

- (./ress [Alt] & C to pic& the [Create] %utton. Use the ta% &ey to hi#hli#ht the first drive and press the space %ar to select it. +hen press [Alt] & O to pic& the [Ok] %utton. >ow /ress [Alt] & P to select 0/rimary1 then press [Alt] & O to pic& the [Ok] %utton.
- :./ress [Alt] & N to activate 0! o >ot ?ormat1. +hen ta% to select the 0?ile system I! 1 drop down %o. . Use the up and down arrow &eys to select 0) . ?! -inu. Raid1.
- ; . Use the ta% &ey to select the 0' nd1 te. t %o. under the 0Si<e1 section. ' nter the si<e you want for this partition in #i#a%ytes followed %y 0G51.
- 4. /ress [Alt] & O to pic& the [Ok] %utton to create the first of the Software Raid partitions.
- =. /ress [Alt] & C to pic& the [Create] %utton. Use the ta% &ey to hi#hli#ht the second drive and press the space %ar to select it. +hen press [Alt] & O to pic& the [Ok] %utton. >ow /ress [Alt] & P to select 0/rimary1 then press [Alt] & O to pic& the [Ok] %utton.
- @. /ress [Alt] & N to activate 0! o >ot ?ormat1. +hen ta% to select the 0?ile system I! 1 drop down %o. . Use the up and down arrow &eys to select 0) . ?! -inu. Raid1.
- A. Use the ta% &ey to select the 0' nd1 te. t %o. under the 0Si<e1 section. ' nter the si<e you want for this partition in #i#a%ytes followed %y 0G51.
- B. /ress [Alt] & O to pic& the [Ok] %utton to create the second of the Software Raid partitions.

C. /ress [Alt] & I to pic the [Rai