



Linux Overview Installation and Administration

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Supported Distribution

- ▶ Novell SUSE is the Linux distribution supported by UGS LINUX products
 - ▶ Novell SUSE Enterprise Server (SLES) 9 SP2
 - ▶ Novell SUSE Desktop (NLD) 9 SP2
 - ▶ Both based on Linux 6.2 kernel
 - ▶ Other SUSE versions (like Professional are NOT SUPPORTED)
- ▶ Some UGS applications support additional distributions as determined by their market and customer requirements
 - ▶ NX Nastran and Parasolid already support Red Hat



Hardware Platforms

- ▶ The UGS Linux platform is x86-64 and 64-bit
 - ▶ Products not already supporting 32-bit Linux will be 64-bit only
 - ▶ NX, TC Engineering, TC Enterprise and TC Visualization
 - ▶ Intel EM64T and AMD x64 processors
 - ▶ Dell, HP, IBM, FSC and Sun
 - ▶ No SMP support in NX yet but will be at a future release
 - ▶ Some products will support other hardware platforms and distributions as required by their market needs
 - ▶ NX Nastran

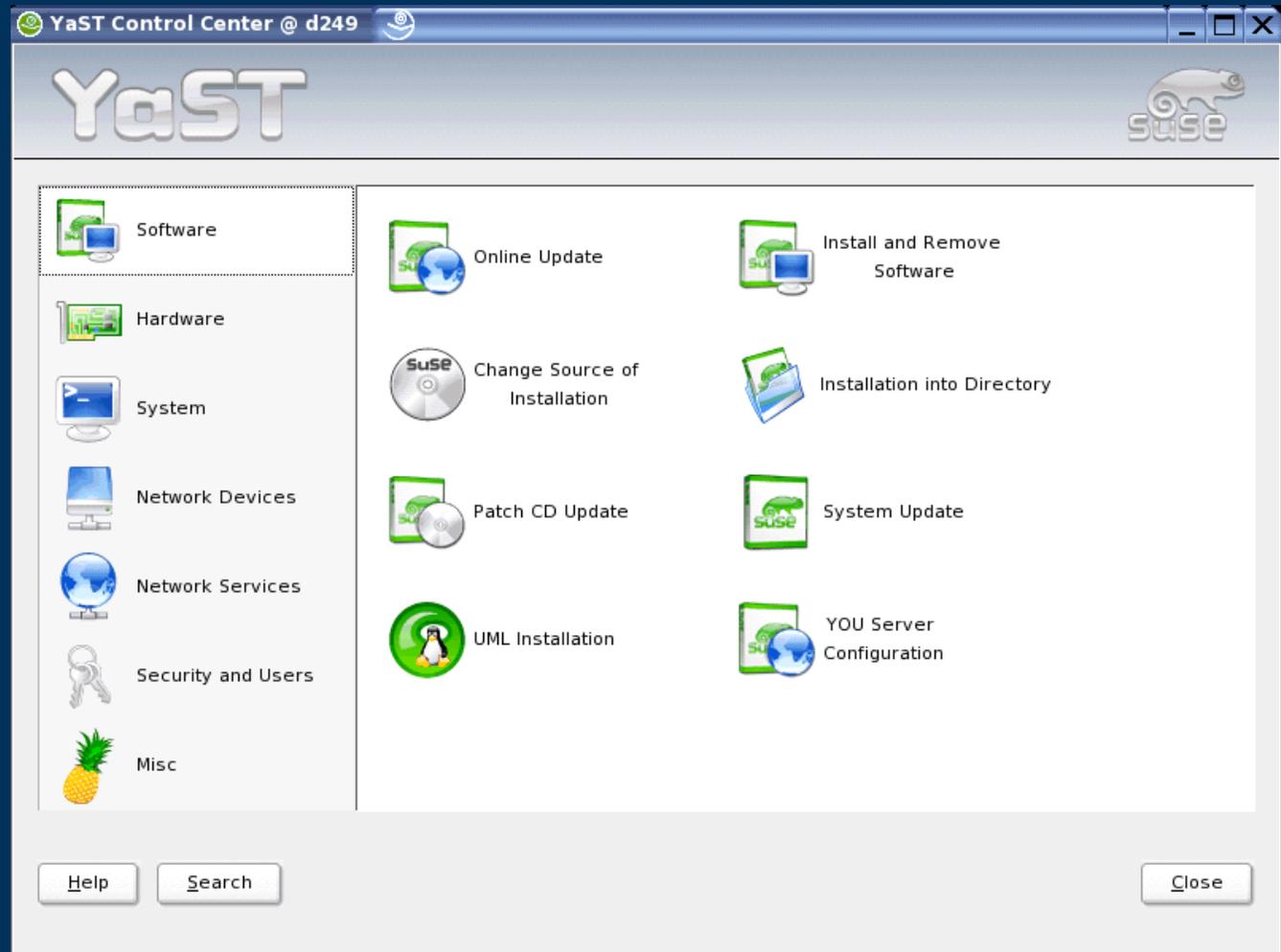


Linux Installation



SUSE Linux YaST

- ▶ Novell SUSE has a great installation and configuration tool

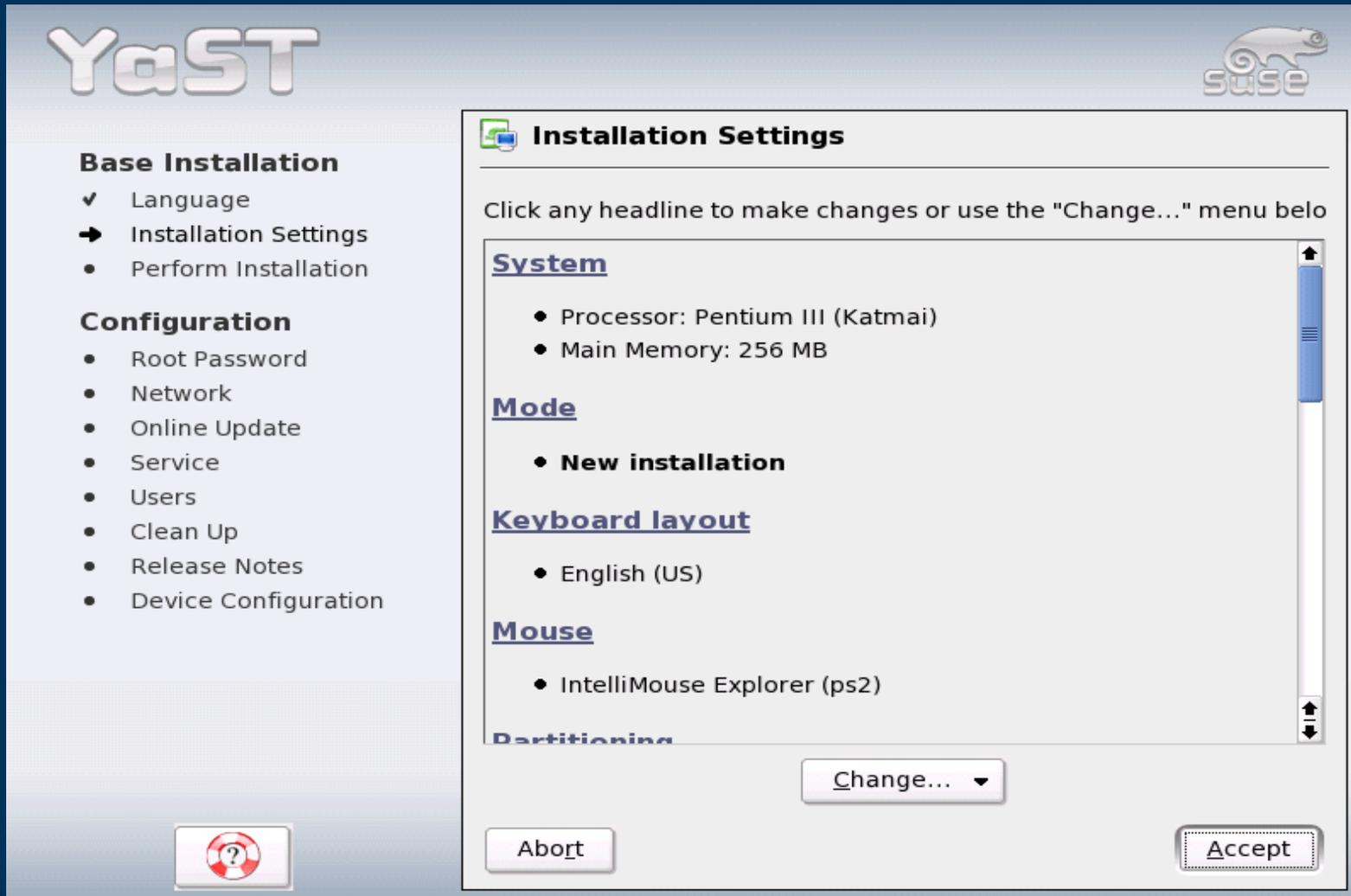




Linux Installation



Installing SUSE Linux



The image shows the YaST (Yast) installation utility interface. On the left is a navigation pane with 'Base Installation' (Language, Installation Settings, Perform Installation) and 'Configuration' (Root Password, Network, Online Update, Service, Users, Clean Up, Release Notes, Device Configuration). The main window is titled 'Installation Settings' and contains a scrollable list of settings: System (Processor: Pentium III (Katmai), Main Memory: 256 MB), Mode (New installation), Keyboard layout (English (US)), and Mouse (IntelliMouse Explorer (ps2)). A 'Change...' button is at the bottom of the scrollable area, and 'Abort' and 'Accept' buttons are at the bottom of the window.

YaST

Base Installation

- ✓ Language
- ➔ Installation Settings
- Perform Installation

Configuration

- Root Password
- Network
- Online Update
- Service
- Users
- Clean Up
- Release Notes
- Device Configuration

Installation Settings

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

System

- Processor: Pentium III (Katmai)
- Main Memory: 256 MB

Mode

- **New installation**

Keyboard layout

- English (US)

Mouse

- IntelliMouse Explorer (ps2)

Partitioning

Change... ▼

Abort Accept



Linux Installation



Installing SUSE Linux

- ▶ Several additional software items need to be loaded in addition to what is installed with the “full” install.
 - ▶ Required to install NX and 3D graphics

Patch ID	Comments
kernel-source-2.6.5-7.191.x86_64.rpm	From SP2 Devel selection. This module is required for hardware driver updates.
pdksh-5.2.14-780.7.x86_64.rpm	From SP2 Devel selection. This module adds the korn shell for NX installs.
make-3.80-184.2.x86_64.rpm	From base LSB Runtime Envir selection. This module is required for hardware driver updates.



Linux Installation



Installing SUSE Linux

► Required for Open

Patch ID	Comments
gcc-c++-3.3.3-43.34.x86_64.rpm	From SP2 Devel selection. This module installs C++ compiler
gcc 3.3.3gcc-3.3.3-43.34.x86_64.rpm	From SP2 Devel selection. This module installs the C compiler.

► May be required to uncompress

Patch ID	Comments
Ncompress-4.2.4-1.2.x86_64.rpm	From SP2 Productivity Selection. This module installs Ncompress



Graphics Support

- ▶ Currently only supporting nVidia graphics adapters
 - ▶ Expect to have support for ATI later this year
- ▶ Basic Linux install will not install required 3D graphics drivers
 - ▶ This is not a Novell SUSE issue but common to Linux distributions
 - ▶ Since graphics vendors do not provide driver source their drivers are not part of the distribution
 - ▶ This could change in the future
- ▶ So graphics driver always needs to be installed separately



Graphics Support

- ▶ Currently nVidia does not supply drivers in rpm format
 - ▶ Exit the X session and login to root
 - ▶ “cd” to directory that contains the driver
 - ▶ “sh *driver.run* -q”
 - ▶ Answer questions with either yes or OK as appropriate
 - ▶ “sax -m 0=nvidia” to accept configuration
 - ▶ Reboot to make sure all is well



Graphics Support

- ▶ Tools you can use to see whether the driver has installed
 - ▶ From the command prompt type “nvidia-settings” to start GUI based nvidia tool
- ▶ There are also some log files in “/var/log” you can check that will give you nvidia and system installation info
 - ▶ “nvidia-installer.log”
 - ▶ “xfree86.0.0.log”
- ▶ You also can use “nvidia-bug-report.sh” command to generate a debug file that might be helpful



UGS Linux Product Overview



Novell SUSE UGS Positioning

- ▶ NX Nastran – Shipping
- ▶ NX – Shipping
- ▶ TC Visualization – Shipping
- ▶ TC Engineering and Enterprise – Shipping 2H06
- ▶ All 64-bit Native applications
- ▶ Issues/Concerns
 - ▶ Availability of 3rd party applications
 - ▶ Desktop productivity tools
 - ▶ Maturity of Linux as high-end 3D Desktop OS



UGS Directions

Platforms by Product



Thank You